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GOVERNMENT CONCEPT OF OPERATIONS (GCO)
FOR
ELECTRONIC COMMERCE (EC)
IN AN
INTEGRATED DIGITAL ENVIRONMENT (IDE)

05/24/00

Contents

1.0 Introduction

1.1 Purpose

This document is a joint effort by U.S. Army Simulation, Training and Instrumentation Command (STRICOM) and the Naval Air Warfare Center Training Systems Division (NAWCTSD). STRICOM and NAWCTSD are pursuing a joint approach to electronic commerce (EC) because they work with many of the same trading partners and share a common physical facility, an integrated digital environment (IDE)[1] and an essential functional process—procurement.

EC enables trading partners to work together more effectively in an electronic marketplace. EC does so by increasing the velocity of information exchange and, thus, shortening overall business processes.

In an EC environment, people need not wait for information; it is universally available almost immediately. As such, more functions can play effectively in system engineering, procurement and logistics processes. Work coordination is simplified. When trading partners throughout the acquisition community use EC fully, warfighters will be more likely to get essential military capabilities[2] when they need them and at a cost, they can afford.

This GCO also describes another important component of Department of Defense (DoD) acquisition commands—the IDE. The IDE is the internal information technology environment that enables these commands to manage their own information better and to work with others in an electronic marketplace. A government IDE approximates the capabilities of "product data management systems" used in industry.

1.2 Document Organization

The next section defines two key terms—electronic commerce and integrated data environment. The following section describes the STRICOM's and NAWCTSD's strategy for EC and an IDE. The next section describes the new work environment in which the STRICOM and NAWCTSD will conduct EC with their agents and trading partners. Next, the document presents essential information on standards and other facets of EC that trading partners should use in implementing EC and using the IDE. Finally, the document describes the responsibilities of government parties for EC.

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[1] The draft document, *STRICOM Plan to Transition to the Digital Environment*, September 30, 1998, outlines STRICOM's vision, scope, status, required infrastructure, system solution, plan for legacy systems and data, resources, constraints, and schedule for its IDE. This Plan is an Army requirement. There is no similar Navy requirement for NAWCTSD.

[2] In the context of this document, those capabilities result from system and equipment acquisition programs, modification programs, and related research and development programs.

Appendix A lists applicable documents to EC and an IDE. Appendix B lists useful sites on the World Wide Web related to this GCO. Appendix C describes the details of the IDE infrastructure at STRICOM and NAWCTSD. Appendix D provides detailed information on government data base design standards applicable to EC and interfacing with an IDE. Appendix E contains information and procedures on using the Government's video conferencing facility in support of EC. Finally, Appendix F describes the national and international standards STRICOM and NAWCTSD will use with their agents and trading partners. These standards will be used in conjunction with the commercial hardware and software described in Appendix C. Finally, Appendix G provides detailed information needed by trading partners to exchange data and to create the collaborative work environment needed to acquire and support military capabilities.

1.3 Key Terms

1.3.1 Electronic Commerce

A functional definition of EC is

- the Government's capability to communicate, as part of normal business processes, its requirements for goods and services to its agents[3] and private sector trading partners in digital electronic form encoded with mutually agreed-upon commercial standards and

- its trading partners' capabilities to communicate program cost, schedule, and performance information[4] about those goods and services back to Government in a similar manner.

In today's acquisition environment, these capabilities of the Government, its agents and trading partners arise from voluntary, mutual efforts to plan, determine requirements, apply standards, integrate processes and develop and implement agreements to trade in an electronic marketplace. This new voluntary approach represents a departure from a prior arms-length, contractually defined relationships between government and industry trading partners. The new approach is necessary to implementing EC in a global, competitive marketplace and to achieving the benefits of EC. However, a mutual approach should not detract or interfere in any way with the separate interests of buyers and sellers. Nor, does it abrogate the public trust responsibilities of government buyers.

1.3.2 Integrated Digital Environment

A description of an IDE[5] is:

> *The armed forces of the United States operate in an information rich*
> *electronic environment that integrates technical and tactical information.*
> *Technologies and doctrine are rapidly developed and employed.*

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[3] The Government's agents are the commands that administer contracts (the Defense Contract Management Command), audit the contracts (the Defense Contract Audit Agency), and perform finance and accounting (the Defense Finance and Accounting Service).

[4] Cost, schedule, and performance information includes the broad range data that are used to define, produce and support a product or are needed to administer a contract.

[5] From a *White Paper, The Integrated Data Environment: Continuous Acquisition and Lifecycle Support*, p. 1, October 15, 1996, http://www.acq.osd.mil/api/tpm/ppmo.htm.

Readiness and warfighting capabilities are continuously improved to maintain our superiority over a potential adversary.... [The Department provides an] integrated data environment and the implementing processes for the people who design, acquire, use and support weapon systems. This gives them the technical and management information needed to field, operate, and sustain affordable, effective weapon systems and to achieve major reductions in process cycle times. Ready access to accurate acquisition and logistics information improves lifecycle management, enabling mission performance at lower cost. The integrated data environment is further characterized by:

- *broad based multi-functional industry and government teams,*

- *use of international standards throughout the product lifecycle,*

- *use of an international information highway to provide access to integrated data throughout the global industrial base,*

- *flexibility to grow with and adapt to user information needs and*

- *appropriate levels of security.*

And accomplish this with a 50% reduction in weapon systems acquisition cycle time.

1.3.3   Relationship of Electronic Commerce to an Integrated Digital Environment

A useful way of looking at the relationship of conducting EC in an IDE is as follows. EC focuses on the process and information content of trading. It includes planning, determination of requirements, application of standards, integration of processes and development and implementation of agreements to trade in an electronic marketplace. The IDE—whether a government capability or that of commercial trading partners—is the technical capability to effect EC. The IDE enables functional users to gather, analyze, communicate and share information readily within a trading partner community.

An important aspect of the IDE is "contractor integrated technical information service" (CITIS). Nominally, CITIS is the negotiated contractual arrangements for the government to access program cost, schedule and performance information delivered in place in a private sector trading partner's own IDE. However, in today's acquisition environment, CITIS must not only provide for conventional delivery of pre-defined data products but also a collaborative work environment required for government-industry integrated product teams to work together successfully. Appendix G provides important information regarding STRICOM's current Enterprise CITIS initiative.

1.4   Scope

The strategies, policies, practices and procedures set forth in this document are applicable to all programs and associated contractual activities throughout the lifecycle of systems

where trading partners can replace paper-based exchanges of information with digital electronic exchanges.

This version of this GCO specifically covers key EC information exchanges throughout the acquisition/CLS contract life cycle. This GCO emphasizes the contract life cycle, technical data, and contractor performance reporting as initial steps because they model the essential information needed for the acquisition process.

1.5   Application

This GCO serves as guidance to government and contractor activities for their preparation EC plans and development of related capabilities. Contractors shall use this GCO with other parts of the Request for Proposal (RFP) as source information for developing a contractor's approach to EC. However, trading partners should not consider it to represent any commitment on the part of the Government.

Participating activities are encouraged to propose beneficial changes to this GCO that may improve processes, increase quality, or reduce costs. Users may submit recommendations directly to Ms. Donna Felix, STRICOM EC Project Director, Email: Donna_Felix@stricom.army.mil.

STRICOM and NAWCTSD publish this document simultaneously on their Web sites. Publishing the document electronically enables the Government to keep it current and provide it to the widest possible community. Like other Web sites, content on STRICOM's and NAWCTSD's sites may change frequently and some areas may be "*UNDER CONSTRUCTION* "from time to time. Therefore, government and contractor users should review the document on the Web sites frequently to keep abreast of changes in EC and IDE plans and capabilities.

2.0   Government's Strategy

2.1   Electronic Commerce

2.1.1   Requirement for EC

STRICOM and NAWCTSD are implementing EC because:

• Global competitive pressure is driving the world business community to transact business electronically. The need to get products to market quickly and to use enterprise resources effectively is dictating this rapid move to EC. The Federal Government and the DoD recognize these changes. They have adopted policies that will move its acquisition and procurement processes to be essentially paperless by January 2000.

• At the same time, the missions of STRICOM and NAWCTSD are straightforward: Get appropriate military capabilities into warfighters' hands when they need them. Of equal importance is that these capabilities be affordable.

- Recent DoD acquisition reforms have provided acquisition commands, such as STRICOM and NAWCTSD, with a new business process framework[6] that helps them meet their mission requirements. As acquisition commands adopt that new framework, they find that they must streamline their business processes. The best and quickest means to streamline internal business processes, as well as the business processes acquisition commands share with their agents and trading partners, is to implement EC within a IDE.

This situation with respect to the need for EC leads to the following STRICOM and NAWCTSD EC vision, goal and objectives.

2.1.2   EC Vision

Essentially all exchanges of acquisition, procurement, and life-cycle support-related information between STRICOM and NAWCTSD and their vendors and agents will move towards using EC state of commercial practice.

2.1.3   EC Goal

Implement the EC Vision in concert with Federal and DoD EC policy, initiatives and programs *without* adversely impacting government or trading partner cost, schedule or performance.

2.1.4   EC Objectives

- Use a comprehensive, coherent approach in realizing the goal.

- Reach out to STRICOM's and NAWCTSD's agents and trading partners and their vendors to ensure that, as a community, all exploit appropriate EC opportunities.

- Work with standards consortia and trade associations to ensure that commercial standards reflect STRICOM's and NAWCTSD's EC requirements and those of their current and potential trading partners.

It is important to note that EC is not another, additive work requirement. EC is a different, more efficient way of working. In the final analysis, implementing EC is the direction STRICOM and NAWCTSD are moving to deal effectively with limited resources and the continuing reductions in their acquisition workforces.

2.2   Integrated Digital Environment

2.2.1   Requirement for an IDE

The IDE effects improvements in business processes by enabling integrated Government and industry product teams (IPTs) to make collaborative decisions in acquisition and logistics business processes. IPTs can include any participants in acquisition commands' processes, including their agents and trading partners and their vendors. Collaborative decisions help reduce costs, shorten cycle times, improve readiness and enhance the

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[6] That is, Integrated Product and Process Development and Integrated Product Teams as described in *Department of Defense Regulation 5000.2-R, Subject: Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs*, March 15,1996.

quality of decision making in those processes.

The concept of an IDE recognizes the need to share information in a meaningful way—the right information at the right place at the right time to effect an informed collaborative decision or action. This concept is essential to making EC process improvements.

<u>2.2.2</u>   <u>IDE</u> <u>Objective</u>

STRICOM's and NAWCTSD's collective objective for the IDE is to use their available information technologies more fully in an integrated way to support EC requirements.

3.0   Description of the New Acquisition Work Environment

In some respects, classification of the components in a new work environment as either part of EC or part of the IDE is somewhat arbitrary. This GCO groups components that relate more to business processes and information as part of EC. Those components that relate more to technical or product information are part of an IDE. EC and IDE components are parts of a whole capability for trading partners to work together in an electronic marketplace.

<u>3.1</u>   <u>Electronic</u> <u>Commerce</u>

<u>3.1.1</u>   <u>EC</u> <u>Programs,</u> <u>Technologies</u> <u>and</u> <u>Initiatives</u>

The following sections describe available government tools for use in EC. Over time the government will add additional tools and, as part of developing their IDE, will further integrate those tools.

<u>Task</u> <u>Package</u> <u>Automation</u>

Task Package Automation system provides STRICOM with a standardized method for paper-free development and routing and approval of a procurement data package. The automated Task Package allows a government-only IPT to perform on-line collaboration, approval, and status tracking of procurements. TPA also provides the interface to Standard Procurement System (SPS) /Procurement Desktop-Defense (PD^2) (described below) allowing data entered in the Task Package to be imported into SPS. A major goal of TPA is process re-engineering in order to reduce Procurement Administrative Lead Time (PLAT) and associated resources.

<u>Standard</u> <u>Procurement</u> <u>System</u>

Standard Procurement System (SPS) is the standardized automated procurement system mandated for use by the DoD procurement community for generation and electronic transmission of contractual documents. One of SPS's goals is to provide a fully functional automated information system (AIS) that will standardize the procurement business practices and data elements by promoting the use of the same automated contracting procedures throughout DoD.

SPS is an integrated system consisting of:

- licensed access to the contractor-furnished SPS application software,

- government furnished data,

- a relational data base management system,

- installed government operating environment,

- system connectivity (e.g., local area or wide area network), and

- a Shared Data Warehouse (SDW).

SPS supports DOD procurement functions that include acquiring systems, supplies and services. The process begins with receipt of a requirement and ends with contract closeout. Standard, automated procurement functions performed during this process include:

- Collecting the requirements

- Determining the appropriate method for acquiring systems, supplies or services

- Soliciting and selecting sources

- Awarding, reporting, modifying, terminating, and closing out contracts and other instruments

- Inspecting and accepting systems, supplies, or services

- Monitoring and administering quality assurance actions and programs

- Production and engineering surveillance

- Property administration

- Determining amounts payable

- Monitoring, approving, and tracking payments.

PD^2 is intended to be used at 137 contracting sites throughout the Department. The software, from American Management Systems Inc. of Fairfax, VA, will let DoD contracting offices within the Army, Navy, Air Force, and Defense Agencies exchange data with other organizations in the Department. Although the initial software release will support only about 45 percent of DoD's basic procurement functions, the releases planned for next year and 2000 will satisfy the remaining requirements.

3.1.2   Standard Procurement System Deployment at STRICOM and NAWCTSD

Current plans call for implementing SPS at STRICOM and NAWCTSD during 3rd Quarter 99.

Proposal Evaluation Tool

STRICOM uses the Proposal Evaluation Tool (PET) to evaluate proposals submitted by its trading partners. PET provides the government the capability to make the source selection process quicker and more efficient by streamlining the Source Selection

evaluation process and providing an audit trail. Some of the capabilities of PET include paperless proposal input; online source selection status for team leader; automatic form generation; on-line documents; rapid generation of briefings and reports; multi-program protected. Additionally, the Government may use non-Government participants in the source selection process. These participants will have access to the offeror's proposals. Offerors are requested to provide written concurrence to the disclosure of proprietary information to all non-Government participants in the source selection process. Offerors format requirements for RFP submission for PET are contained in Appendix H.

3.1.3   Trading Partner Outreach

Trading Partner Agreements

STRICOM and NAWCTSD and their trading partners will develop mutually agreed upon trading partner agreements (TPAs) to supplement this GCO, only as required. Those TPAs will define how a trading partner team will implement EC for contracts in effect within that community. Each party, at its own expense, will provide and maintain the equipment, software and services necessary to reliably transmit, receive and control data required in the contract or used by integrated product teams in that community. Trading partners will periodically test and monitor such equipment, software and services to ensure that they are adequate to reliably transmit, receive and control data.

21st Century Commerce Workshops

STRICOM will host periodic 21st Century Electronic Commerce Workshops to ensure open communications between the Government and its industry trading partners. The Workshops will be an open forum allowing all parties to express their thoughts, concerns and ideas on EC. Information on upcoming Workshops and the results from past workshops is available on the STRICOM Web site, http://stricom.army.mil/STRICOM/ELECTRONIC_COMMERCE/

3.1.4   Other Outreach Programs

Electronic Commerce Resource Centers

The Electronic Commerce Resource Centers (ECRCs) are valuable resources that provide a variety of services to STRICOM, NAWCTSD and industry. An ECRC has the capability to reach out to clients to make them aware of and improve their skills in using many EC technologies; including, the Internet and electronic data interchange. The regional ECRC that serves STRICOM and NAWCTSD is located in Largo, FL. The Largo ECRC Web site is at http://www.fecrc.ctc.com/.

Procurement Technical Assistance Centers

Information about obtaining assistance from Procurement Technical Assistance Centers (PTACs) is available at http://www.dla.mil/ddas/procurem.htm.

Small Business Development Centers

Information about obtaining assistance from Small Business Development Centers (SBDCs) is available at http://www.acq.osd.mil/ec/assist.htm.

EC Pilot Projects

STRICOM (CSE) welcomes suggestions from industry or other Government TPs regarding mutually advantageous EC pilot projects. Current pilot projects include the following:

- Enterprise Contractor Integrated Technical Information Service (ECITIS) –described in Appendix G.

- Earned Value Reporting by Electronic Data Interchange (EDI)—explained Key Trading Partner Exchanges, paragraph 4.3.

- Electronic Contracting—explained in Key Trading Partner Exchanges, paragraph 4.3.

- Logistics EDI- Contractor Logistics Support logistics information will be transmitted via ANSI X12 846, Inventory Inquiry/Advice.

3.2   Integrated Digital Environment

An essential organizational and process aspect of the new electronic acquisition work environment is the integrated product team (IPT). IPTs should include and engage all appropriate participants in system acquisition and life cycle support. Thus, IPTs include government staff, their agents' staffs and trading partners as and when appropriate.

This section describes the Government's IDE infrastructure that IPT members should consider when determining information interchange and communication requirements. The material below is provided to allow IPT members to understand the capabilities of government users and to make informed decisions regarding options and capabilities that will be or could be established to support a particular program.

3.2.1   IDE Programs, Technologies and Initiatives

Continuous Acquisition and Life-cycle Support[7]

DoD initiated CALS—Continuous Acquisition and Life-cycle Support—in the mid-1980s as a means to use technology to better manage its huge volume of paper-based technical manuals. New weapon systems entering the inventory at that time required more and highly complex manuals. Computer-based electronic publishing offered a way to speed up the publishing process. It also would reduce the mass of paper manuals that

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[7] DoD has changed the words behind CALS over time to embrace new, larger concepts. From the original Computer-aided Logistics Support, they changed the name to Computer-aided Acquisition and Logistics Support then to Continuous Acquisition and Life-cycle Support. Many in the U.S. private sector now refer to CALS as "Commerce at Light Speed." In the global market, many see the word "CALS" only as an icon that embodies CALS concepts.

warfighters had to carry and laboriously update with an unending stream of change pages.

From that original focus, CALS grew rapidly, especially outside the U.S. defense community. Today, it is an internationally recognized icon for a product life-cycle management strategy to capture, encode, store, and share information throughout global enterprises. Governments and industries worldwide have adopted the CALS strategy to improve their competitiveness in the global marketplace. Its strengths lie in its use of standards-based information exchange and the concept of enterprise information sharing. In an international context, CALS is great success.

The legacy of the CALS initiative for STRICOM and NAWCTSD is the IDE and its component applications— Joint Engineering Data Management Information and Control (JEDMICS) and Joint Computer-aided Acquisition and Logistic Support (JCALS) system described below. Another legacy is the set of information technology standards for encoding and exchanging technical information. Those standards are included in Appendix A.

Joint Engineering Data Management Information and Control System

JEDMICS is one of two key IDE components that are already providing a technical information base for the Department. JEDMICS is a fielded, standard system to acquire, manage, store, and distribute technical information for the design, production, and support of defense systems. It is a distributed system, consisting of hardware, software, and data at 34 interconnected repository sites, as well as tools that enable local and remote access. The key to this system's success is that it can provide its huge library of indexed information in standard digital electronic form to government and commercial users worldwide. Some 26,000 users rely on JEDMICS every day for many tasks such as design, contract administration, reprocurement, in-service engineering, and field-level maintenance. The system currently manages over 70 million images.

Joint Computer-aided Acquisition and Logistic Support (JCALS)

The other IDE component—the Joint Computer-aided Acquisition and Logistic Support system, or JCALS system—comprises hardware and software enabling engineers and others to work with technical information to produce and manage documents. This system includes a global data management system (GDMS) to locate indexed information, a tool set for writing documents, and a workflow manager for document production. Currently, its strengths are in locating information globally and in creating technical documents. JCALS users have transparent access to JEDMICS through the GDMS as GOTS[8] middleware.

3.2.2   JCALS Deployment at STRICOM and NAWCTSD

Some uses:

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[8] Off-the-shelf (OTS) components are software or hardware products that are fully developed and marketable. OTS components include government (GOTS) and commercial (COTS) products.

- IDE/ECITIS
- ECP processing
- Tech manuals

3.2.3 IDE Infrastructure

Appendix C includes tables and other descriptions of the hardware and software capabilities at STRICOM and NAWCTSD. These suites of hardware and software comprise STRICOM's and NAWCTSD's respective IDE capabilities. STRICOM's and NAWCTSD's agents and trading partners should consider these IDE configurations when planning communication, data exchanges and IPT support. These suites also represent the de facto commercial standards for conducting EC. These commercial standards should be used, as appropriate, in conjunction with the national and international information encoding, interchange and communication standards described in Appendix F.

3.2.4 Database Design Standards

STRICOM's Information Systems Division (ISD) is moving toward a data-centric development shop. This means it stresses the complementary concepts of data ownership and one-time data entry. Data ownership refers to defining clearly at the highest level of an organization or agency, who owns each piece of data. For example, civilian personnel information is owned by the Defense Civilian Personnel System. One-time data entry, as its name implies, refers to capturing data as a by-product of doing business.

Additionally, the ISD is moving toward the thin-client paradigm. By doing so, it will capture business rules at the highest possible level, preferably at the database as stored procedures and triggers. Appendix D contains STRICOM ISD's detailed database design standards.

3.2.5 Video Teleconference Center

A Video Teleconferencing Center (VTC) is available to STRICOM, NAWCTSD and trading partner IPT members. Appendix E, details procedures for using the VTC.

4.0 Using Electronic Commerce in the Integrated Digital Environment

4.1 Applicable Standards

Commercial standards are essential to the smooth working of the global economy. In the information component of the economy, information standards are most important. Without universal adoption of appropriate standards, information simply does cannot move. Appendix F describes the information technology standards STRICOM and NAWCTSD employ in their approach to EC and in their IDE. A trading partner community should invoke these standards as appropriate considering current and potential reengineered business processes and the nature and life cycle requirements of the information used in those processes.

4.2 <u>Central</u> <u>Contractor</u> <u>Registration</u>

Central Contractor Registration (CCR) establishes a single point of registration for all contractors. To facilitate this concept, DoD has developed a computer-based registration capability functioning as the repository of registration data. The repository contains the following data:

- Electronic addressing information

- Trading Partner profiles

- Other pertinent supplier information.

Vendors should send or fax CCR applications to the Acquisition Reform/Electronic Commerce office in McLean, VA. The new address is:

Electronic Commerce Information Center
7676 Old Springhouse Road
McLean, VA 22102
800-EDI-3414 (voice)
703-275-5691 (fax)

Government and industry may refer to the JECPO Web site at http://www.acq.osd.mil/ec for information about current Government EC initiatives, CCR registration and other EC related issues.

4.3   Key Trading Partner Information Exchanges

4.3.1   <u>Contract</u>

- Draft/Final/Amended RFPs – WWW

- DO/TO/Award/Mod/ANSI X12 850/860

- DCMC copy of RFP - 840

4.3.2   <u>Technical</u> <u>Data</u> <u>and</u> <u>Contractor</u> <u>Integrated</u> <u>Technical</u> <u>Information</u> <u>Service</u>

The arrangements for trading partners to exchange cost, schedule and performance data in digital electronic form during contract performance is defined as Contractor Integrated Technical Information Service (CITIS). MIL-STD-974, a CALS interface standard defines the requirements for a CITIS "instance"[9]. CITIS instances provide functions that collectively constitute automated services for electronic access to and delivery of contractually required digital data for an individual program or contract. MIL-STD-974 also defines support and ancillary functions necessary to efficient CITIS use. However, MIL-STD-974 does not address the implementation of a specific information technology for a CITIS, nor the use or content of data accessible via a CITIS.

Appendix G describes STRICOM's global approachable CITIS, "Enterprise CITIS" (ECITIS). "Enterprise CITIS applies to all contracts awarded by STRICOM after JAN

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[9] A CITIS "instance" is contractual, technical and data requirements for an individual program, contract or modification to a contract.

2000. The Appendix describes ECITIS. Enterprise CITIS (ECITIS) will reduce CITIS costs by reducing the variability of implementations and by making some of the services aspects, such as training, common for all members of the trading partner community. All STRICOM CITIS requirements applicable to solicitations awarded prior to date of this document will conform to CITIS, requirements specified in the contract unless the joint IPT decides to migrate to ECITIS.

4.3.3   Contractor Performance Reporting

EC is used to solve the problem of sharing data between the contractor and the Government, as well as operating systems, applications, and computers using a simple neutral format. In the program management environment, the use of EC allows a program office to select commercial off the shelf tools and processes to exchange data in an electronic environment without having to spend scarce program funds on contract unique data format and delivery requirements.

The 839 Project Cost Reporting X12 transaction set is used to exchange this information. The 839C (Cost Performance Reports and Cost/Schedule Status Reports) and 839F (Contract Funds Status Reports) implementation conventions available from the National Institute of Standards and Technology (NIST) Web site will be used. When DD1921 Cost Data Summary Report is required, ANSI X12 196 (Contractor Cost Data Report) will be used. Schedule data will be communicated via ANSI X12 806 (Project Schedule Reporting). The specific version will be specified upon award. More information can be obtained from the following web site: http://snad.ncsl.nist.gov/fededi/4010-ic.html.

4.3.4   Logistics Data Reporting

STRICOM developed the Logistics Acquisition & Readiness Management System (LogARMS) to lead the STRICOM Logistics Directorate into the 21st Century with a paperless and consistent method of logistics management business and information analysis. LogARMS objectives include: maintaining consistency and integrity of logistics data, providing access to multiple views of data for operational and decision support functionality, and provide an environment for entering, evaluating, and reporting logistics data.   LogARMS consists of business processes integrated with new technologies to meet a paperless, logistics management environment. Contractor Logistics Support (CLS) inventory, performance and utilization data is transmitted by CLS contractors via ANSI X12 transaction set 846 (Inventory/Inquiry Advice). Current implementation conventions (formats) for STRICOM use of X12 846 are contained in Appendix F Attachments 1-6.

ANSI X12 will also be used by production contractors to initialize the LogARMS data warehouse. Specific transaction set will vary depending on specified data required and both will be identified in the production RFP and contract. Examples of data, which may be required from the production vendor for smooth transition to CLS, include:

- Lowest Repairable Unit (LRU) projected availability,

- forecast data,

- wearout rate,

- replacement rate,

- and production lead-time data.

5.0   Responsibilities

5.1   EC Project Office

EC Project Office (STRICOM Code CSE) responsibilities are as follows:

1. Represent the Command within Army and DoD and with Industry in areas relating to Electronic Commerce, CALS and IDE.
2. Develop IDE solutions which reduce project overhead through shared STRICOM EC/CALS/IDE resources
3. Prepare and submit budget requests based upon input received from PMs and Directorates
4. Develop an IDE between STRICOM and Industry/Other Government trading partners which will accommodate all STRICOM business/technical information exchanges including, but not limited to, CITIS. Interfaces to achieve the IDE will be paper-free and commercial standards based.
5. Provide input for each STRICOM solicitation regarding paper-free information exchanges; review each solicitation for consistency with the current GCO.
6. Participate in source selections as an advisor or member, as requested
7. Coordinate planned technology upgrades/refreshments with STRICOM Code CSIM
8. Maintain and update the GCO to ensure currency with policy and project information requirements
9. Work with Industry and Other Government trading partners to assist them in the rapid implementation of EC/CALS/CITIS/IDE as required.

5.2   Project and Program Managers

Project Directors within the PM CATT, WARSIM, ITTS, TRADE, Engineering, Logistics and CAPO (for FMS projects) Directorates are responsible for compliance with this GCO as follows:

1. Advise CSE "up front and early" of all pending solicitations, re-competes, major delivery orders or modifications involving information exchange
2. Ensure the current GCO is appended to each solicitation document
3. Ensure the SOW and CDRLs are consistent with the current GCO; all information exchanges must conform to commercial standards for paper-free exchange

4.   For Acquisition projects, ensure CITIS requirements are consistent with
     ECITIS addressed in Appendix G; advise CSE of any "unique" requirements
     which may not currently be accommodated in ECITIS so they may be included
5. For Contract Logistics Support (CLS) projects, ensure "CITIS" is defined as
     transmission of data from contractor via ANSI XI2 transaction set _846
6.   The implementation convention (format), which is currently under
     construction, for this specific logistics data exchange will be added as
     Appendix _J_ to this document.

5.3   Procurement

Contracts Division responsibilities are as follows:

1. Ensure CSE is involved in all pending solicitations "up front and early"
2. Ensure all solicitation documents are consistent with this GCO; ensure
    information exchange requirements are coordinated with CSE.
3. Ensure Proposal Evaluation Tool (PET) requirements outlined in Appendix H
    are specified in solicitation documents; ensure PET training and source
    selection facility reservations are scheduled with CSE as early as possible.
4. Ensure software re-use requirements are delineated in accordance with
    Appendix I.

5.4   Logistics

Information Technology Division responsibilities are as follows:

    1. Advise CSE of pending changes to software/hardware/TELCOM/data
structure/data warehousing, etc. which may affect IDE as currently outlined in the GCO.
Coordinate with CSE during the planning stage to ensure IDE requirements are
accommodated.

Appendix A—References

The following documents form a part of this GCO to the extent specified herein. In case of a conflict between documents referenced herein and the contents of this GCO, the contents of this GCO shall be the governing requirements.

Commercial Standards
UNDER CONSTRUCTION
Military Standards:
DOD-SMC-IC Approved DOD EDI Implementation Conventions
MIL-PRF-28000 Digital Representation for Communication of Product Data: IGES Application Subsets and IGES Application Protocols
MIL-PRF-28001 Markup Requirements and Generic Style Specification for Exchange of Text and Its Presentation
MIL-PRF-28002, Raster Graphics Representation in Binary Format, Requirements for
MIL-PRF-28003 Digital Representation for Communication of Illustration Data: CGM Application Profile
MIL-PRF-87268 Manual, Interactive Electronic Technical; General Content, Style, Format, and User Interaction Requirements
MIL-PRF-87269 Data Base Revisable, Interactive Electronic Technical Manuals for Support of
MIL-STD-974 Contractor Integrated Technical Information Service (CITIS)
MIL-STD-1840 Automated Interchange of Technical Information
MIL-STD-2549 Configuration Management Data Interface Standard
Federal Information Processing Standards:
FIPS PUB 127-2 Database Language—Standard Query Language (SQL)
FIPS PUB 161-2 Electronic Data Interchange
FE-SMCC-IC Approved Federal EDI Implementation Conventions
Handbook And Manuals:
DOD Manual for EDI for Program Management
Electronic Data Interchange for Program Management Reporting: Getting Started Handbook
MIL-HDBK-28001 Application of MIL-PRF-28001 Using Standard Generalized Markup Language (SGML)
Defense Acquisition Deskbook

Appendix B—Electronic Links

Location	Description
http://www.acq.osd.mil/pm	The Performance Management Group has a WWW site that includes program management EDI policy, topics, documents, answers to frequently asked questions, getting started handbook, and information about commercial off the shelf tools available to import and export program management data using the X12 EDI standards
http://www.acq.osd.mil/api/tpm	Related technical performance measurement WWW site also has additional information about the digital environment policy and memorandums
http://www.deskbook.osd.mil/	Defense Acquisition Deskbook Web Site
http://www.acq.osd.mil/api/tpm/ppmo.htm	DoD's Integrated Digital Environment (IDE)
http://www.sps.hq.dla.mil	Standard Procurement System
http://www.acq.osd.mil/ec/	Joint Electronic Commerce Program Office

Appendix C—Integrated Digital Environment Infrastructure

This Appendix describes the Government's IDE infrastructure in terms of hardware, software, and communications capabilities.

STRICOM IDE Capabilities

This information is not all-inclusive; rather it gives prospective offerors a general insight into the infrastructure in-place to support this program.

Commercial-off-the-Shelf Applications Used by STRICOM

The STRICOM automation systems support a variety of commercial-off-the-shelf (COTS) software applications. Table C-1 identifies the various COTS software applications by function. The "Until Date" is useful for planning application of data interchange standards. Note: STRICOM runs an NT served network with clients running Windows 95, NT 3.51 and NT 4.0.

Table C-1, STRICOM COTS Applications by Function

Function	Software Application	Version	Until Date	Notes
Databases	Oracle 8.1.6	8i	TBD	6
	MS Access	2.0 & 97	TBD	1, 9
Document Viewing	Acrobat Reader	3.0	TBD	1,3
	PowerPoint Viewer	97	TBD	1, 3
	Envoy Viewer		TBD	
	IMAGE-R		TBD	1
	SLICK!		TBD	1
Graphics	MS PowerPoint	97	TBD	1, 3
Mail	SMTP	2.2	TBD	1
	Lotus Notes Mail	4.6	TBD	
Project Management	MS Project for Windows	98	TBD	1, 3
Scheduling	Lotus Organizer	97GS	TBD	
Spreadsheets	MS Excel for Windows	97	TBD	1, 3
Technical Drawing	AutoCAD for Windows, Release 13	c3	TBD	2
				1, 3
	Visio	5.0	TBD	
Text Editing	MS Word for Windows	6.0, 97	TBD	1,2, 3
Web Browser	Netscape	4.51	TBD	
	Internet Explorer	4	TBD	

Notes:

1. Individual desktop computers support the application.
2. Centralized high-end desktop PCs support the application.
3. Common work areas PCs support the application.
4. Application is not supported.
5. Supports standard .DBF file format.
6. Supported via front-end application using SQL*NET.
7. Preferred for small data sets.
8. Preferred for large data sets.
9. Supported on AIX platform only. Connectivity is limited.

<u>STRICOM</u> <u>Standard</u> <u>Desktop</u> <u>Platforms</u>

STRICOM's automation system comprises a variety of desktop platforms. All desktop platforms are based on Intel Pentium running MS-NT version 4.0 As new systems (Current Platform) are brought into STRICOM's automation system, the older systems (Minimal Platform) are phased out. STRICOM maintains a small, centralized resource center that supports high-speed platforms (High End) for shared use. Table C-2 lists the characteristics of STRICOM standard desktop platforms. The platforms are representative

as not all platforms are configured with the same options.

Table C-2, STRICOM Standard Desktop Platforms

	Current Platform [3]	High End [3]
Model	Compaq DeskPRO EN	Compaq DeskPro 5N
Processor	Intel Pentium	Intel Pentium
Speed	300 MHz	650 MHz
I/O Bus	16 bit ISA /32 Bit PCI	16 Bit ISA/32 bit EISA
RAM	128 MB (Minimum)	128 MB
Hard Drive	1 32 EIDE	2 GB SCSI
Video	SVGA (1024x768)	SVGA (1024 x768)
Monitor	17" SVGA	17" SVGA
Pointing Device	2 button mouse	2 button mouse
Network Interface	10 Mb/s Ethernet	100 Mb/s FDDI 10/100 Ethernet
Multi-media	4x CD-ROM (ATAPI) Speakers	16-24X CD-ROM (IDE) Vozalist Keyboard

Notes:
[1] All systems connected to the STRICOM LAN are limited to VGA
[2] Terminal communications via ProComm
[3] Not all systems support all options

Output Devices at STRICOM

The majority of STRICOM output devices are HP LaserJet IV Si connected via the STRICOM LAN. Most locally connected printers are available. A few large color printers and a large format plotter are also available. Table C-3 identifies the various print and plot capabilities available.

Table C-3, STRICOM Print and Plot Capabilities

Item	Manufacturer	Model/Version
Printers		
	HP	HP5Si with Postscript
	HP	HP4Si with Postscript
	QMS	Magic Color
Plotters		

Item	Manufacturer	Model/Version
	HP	HP755CM with Postscript
	HP	HP750 Monochrome with Postscript

NAWCTSD IDE Capabilities

This section describes the hardware, software, and communications capabilities of NAWCTSD. This information is not all-inclusive; rather it gives prospective trading partners a general insight into the infrastructure in-place to support a program. NAWCTSD will update this information as automated data processing equipment, software and procedures change. Note: NAWCTSD migrated from a Novell PC LAN with Windows 3.1 at the desktop to a Windows 95 Client/Server platform in July 1998.

Commercial-off-the-Shelf Applications Used by NAWCTSD

NAWCTSD automation systems support a variety of commercial-off-the-shelf (COTS) software applications. Table C-4 identifies the various COTS software applications by function. The "Until Date" is useful for planning data interchange standards.

Table C-4, COTS Applications Used By NAWCTSD

Function	Software Application	Version	Until Date
Databases	Oracle 7	2.5	TBD
	Microsoft (MS) Access	97	TBD
Document Viewing	Acrobat Reader	3.0	TBD
	PowerPoint Viewer	4.0	TBD
File Compression	WinZip	6.3	TBD
Graphics	MS PowerPoint	97	TBD
	MS Photo Editor	3.0	TBD
Mail	SMTP		TBD
	Microsoft (MS) Exchange		TBD
Project Management	MS Project for Windows	4.1	TBD
Scheduling	Calendar Creator	5.0	TBD
Spreadsheets	MS Excel for Windows	97	TBD
Streaming Video/Audio	Real Player	5.0	TBD

Function	Software Application	Version	Until Date
Technical Drawing	AutoCAD for Windows, Release 13	c3	TBD
	Visio	4.5	TBD
Text Editing	MS Word for Windows	6.0, 97	TBD
Web Browser	Netscape Communicator	4.05	TBD

NAWCTSD Standard Desktop Platforms

NAWCTSD's automation system comprises a variety of desktop platforms. All desktop platforms use Intel Pentium processors running Windows 95 (4.00.950a). A limited number of workstations are multimedia equipped with CD-ROM and sound cards.

Output Devices Used at NAWCTSD

The majority of NAWCTSD output devices are HP LaserJet IV Si connected via the NAWCTSD LAN. Most locally connected printers are available. A few color printers and a large format plotter are also available.

Engineering Data

Computer-Aided Design

NAWCTSD Computer-Aided Design (CAD) personnel are capable of accepting drawings in digital form in CALS-compliant IGES or, where mutually agreed upon, proprietary formats. This equipment has no telecommunications capability so trading partners must deliver CAD information on physical media. Table C-5 lists NAWCTSD's standalone CAD capabilities.

Table C-5, NAWCTSD Standalone CAD Capabilities

Item	Manufacturer	Model/Version
a. CADDS 5X workstation		
Sparc 2 Monitor	Sun	-
Sparc 2 CPU	Sun	-
Mouse	Sun	-
CD-ROM	Sun	-
Keyboard	Sun	-
8 MM Tape Drive	Sun	-
b. AutoCAD 13 workstation		
Monitor 14 in	Wang	-
CPU 386/33	Wang	-

Item	Manufacturer	Model/Version
Keyboard	Wang	-
Digitizing Board with mouse	Summagraphics	-
Disk Drive 44 MB	Bernoulli	-
c. Software for CAD workstations above		
Electrostatic Printer/Plotter controller		34S/0059
CADDS Graphics		34S/1001
Basic Dimensioning		34S/3021
Engineering Notebook		34S/0600T
IGES		34S/1701T
Versatec Electrostatic Format		34S/0309
CALCOMP 907 Format Support		34S/5021
System Software		0007
Application Software		0010
CADDS 5X		
AutoCAD v12		
Oracle v. 6.0		
DXF		

Joint Engineering Data Management Information and Control System

The Joint Engineering Data Management Information and Control System (JEDMICS) provides a standard digital system for storage, retrieval, reproduction, and distribution of engineering drawings and related technical data. This data supports weapon system maintenance, reprocurement of spares, engineering, training, manufacturing, and logistics. Table C-6 shows the installed hardware at NAWCTSD that supports JEDMICS.

Table C-6, NAWCTSD JEDMICS Hardware

Item
a. Index Subsystem
Silicon Graphics IRIS, L Series computer
Oracle RDBMS
b. Scanners
High Speed Aperture Card Scanner

Item
Large Document Scanner
c. Storage Devices (pending files)
Hard Disk Storage 2.5 GB drives
d. Workstations
Graphic Display Workstations (GDW)
Output Server (SPARC 2)
Image Server (SPARC 2)
Data Integrity Control Workstation (DICW) (SUN) or (depending on how one logs on)
Engineering Graphic Data Workstation (EGDW) (SUN)
Tape Server (SPARC 2)
e. Printers
High Resolution Hardcopy Plotter (E size)
High Speed Printer (A or B size)
Large Format Printer (C size).
f. Optical Digital Mass Storage (ODMS)
100 disk capacity each disk can contain 10.2 GB dedicated SPARC 2 Server for ODMS

Joint IDE Capabilities

STRICOM and NAWCTSD share the capabilities described below.

Local Area Network

The STRICOM and NAWCTSD Local Area Networks (LANs) are connected. The two Commands can exchange data via Email.

Internet and Web Presence

STRICOM and NAWCTSD each maintains Web sites. These sites support a variety of acquisition business processes. A primary one is distribution of Request For Proposals (RFPs). These sites contain information about future contracts, and both draft and final revisions to RFP documents currently in the procurement process. Table C-7 lists site addresses.

Table C-7, STRICOM and NAWCTSD Web Presence

STRICOM
http://www.stricom.army.mil/STRIAM/

http://www.stricom.army.mil/STRICOM/A-DIR/bus_op.html
NAWCTSD
http://www.ntsc.navy.mil/refer/acqguide/acqguide.htm
http://www.ntsc.navy.mil/contract/procure.htm

Intranet Web Sites

STRICOM and NAWCTSD maintain internal Intranet Web sites. Trading partners can connect Web-based CITIS implementations to these sites.

Appendix D—Database Design Standards

This Appendix describes the standards IPT members should use in creating databases for EC applications other than those that meet other commercial standards.

I.   Introduction

    A. Purpose
This document is intended to provide developers, database administrators (DBAs) and the data administrator (DA) a source for policies to develop and maintain corporate information system (IS) databases for STRICOM's Chief of Staff Information Management (CSIM).

    B. Scope
All conventions detailed in this document are to be followed by DBAs and developers of any corporate IS database to be maintained by CSIM. Developers include in-house employees (both federal and support service contractors) and outsourced contractors developing databases to support corporate (vs. single user) IS applications. Corporate IS applications may be defined as applications which require data that is owned by another organizational element or that will be used (viewed and/or modified) by another organizational element. Examples include systems that require human resource, financial or budget information, or DoD or Army-owned data.

    C. Limitations
This document is not intended to govern single-user databases or databases that do not require data to be used by multiple organizational elements. Examples of excluded systems are suspense tracking systems, document cataloging systems, and the like.

    D. Related documents
        1. Government Concept of Operations
        2. Software Development Management Policy

II.   Database Tools Supported

    A. Oracle – Oracle is the Database Management System (DBMS) of choice. All new corporate IS databases will be developed in Oracle. See Attachment A for current version information.

    B. Access – Limited use of Access is permitted for IS development. See Attachment A for current version information.

    C. Erwin – Erwin is the data-modeling tool of choice. See Attachment A for current version information.

    D. Notes Pump – Notes Pump will be used to replicate Notes data into and out of Oracle. See Attachment A for current version information.

III.   Naming Conventions

    A. Logical - All corporate IS databases will have design documentation on file with the DA. Although object names in the physical model will often be somewhat cryptic, the logical model, which includes the entity/relationship

diagram (E/RD) and the data dictionary, will refer to objects using clear, easily understood names. Acronyms and abbreviations are to be avoided as much as possible.

1. Entities - In naming entities, it is important to remember the definition of an entity: An item about which the database will collect data. Entity names are to be singular (e.g., Employee, not Employees). Spaces, but not underscores, are allowed (e.g., Employee Salaries). The first letter of each word is to be capitalized (e.g., Job Order Number). Common names that might be duplicated with other databases are allowed in the logical design.

2. Attributes – The same rules that apply for entity names apply to attributes also.

3. Relationships – Relationships should be named to determine easily what the relationship is between the two entities. For example, if a database tracks offices and their employees, the relationship might be named Employees Work In An Office. Note that this name describes not only the relationship ("Works In") but the cardinality ("Employees…An Office").

B. Physical – The physical naming conventions apply to the actual tables, columns, indices, and other database objects. The following conventions apply universally to most Oracle objects:

XXXX is a maximum of 4-letter abbreviation of the database or system,
O is an abbreviation for the object type
(T= table, S=stored procedure, R=trigger, I=index, V=view)
Only underscores ("_") will be used for spaces in object names

1. Tables – The naming convention for tables is
   XXXX_O_table1_table2_…_tableX

Where table1 through tableX are the actual descriptors of the table (preferably the logical name of the entity or some abbreviation thereof.)
Tables will be referenced in the physical database by either public or private synonyms. Synonyms will have descriptive names (preferably, the logical name of the entity or some abbreviation thereof.) All tables will have a unique identification number column which will be filled by a sequence number. See B.2. for naming conventions of this column.

2. Columns – Column names will be the logical name of the attribute or some abbreviation thereof. The unique identification number columns will be named table1_table2_…_tableX_ID, using the same table name as the base table.

3. Triggers – Triggers will be named
   XXXX_O_table1_table2_…_tableX_TAS
   where the table name is the table upon which the trigger is executed,
   T is a 1 character abbreviation for the timing of the trigger (B=before, A=after),
   A is a 1 or 2 character abbreviation of the action upon which the trigger is to perform (I=insert, U=update, D=delete, IU=insert or update),
   S is a 1 character abbreviation for the scope (R=row-level, S=statement-

level)

4.   Stored procedures – Procedures will be named XXXX_O_table1_table2_…_tableX_action where action is a brief description of the action the stored procedure executes.

5.   Indices – Indices will be named XXXX_O_table1_table2_…_tableX_column where column is the column (or list of columns) the index is based on.

6.   Database instances –

7.   Files –

8.   Synonyms - Synonyms will have descriptive names (preferably the logical name of the entity or some abbreviation thereof.)

9.   Roles – Roles will be named XXXX_role, where role is a descriptive name of the user category or group.

10.   Users – Users will use their STRICOM LAN password. Remote users will be assigned a username based on the same rules as STRICOM users. Each system will have a user account to own the data. These will be named in enough detail to fully define the system.

11.   Views – Views follow the same naming conventions as tables.

IV.   Security

    A. Oracle

        1. Accounts

            a. Access – Access to Oracle will be via an Oracle login account. "OPS$" accounts, or accounts which don't require a separate authentication process, will not be used.

            b. Usernames – Usernames on the production Oracle server will match STRICOM LAN usernames.

            c. Create user script – See Appendix B for a current sample of a valid create user script. Only the DBA, ISSO or DA will create user accounts on the production server.

        2. Password

            a. Initial – The DBA or DA, upon creating an Oracle user account, will assign a meaningless password to the account.

            b. Permanent – After account creation, the ISSO will set the password to match the user's STRICOM LAN password.

        3. Roles

            Roles are to be utilized to the maximum extent possible to control security.

        4. Views

            Views are to be used to the fullest extent possible to prohibit end users from directly accessing base tables. Dynamic views are also to be used with security tables to control user access. See IV.D, Security Considerations, below.

    B. Access – The primary security mechanism for Access databases will be operating system-level security on the directory structure and/or files comprising the Access database.

C. Remote Access – Access from remote sites is to be limited to the maximum extent possible. The production Oracle server sits behind a firewall and remote access must be granted via opening holes in the firewall, which obviously presents a certain degree of security risk. When remote access is required (e.g., granting an external government agency access to troubleshoot a standard system), the preferred method is to host sample data on a test or development server which will can be situated outside the firewall.

D. Security Considerations

1. Even though there is no classified data on the STRICOM LAN or any of our databases, an enemy of the United States could conceivably piece together information in our databases to develop an intelligence picture. For example, if one database showed trainer locations, and another showed trainer fielding, an agent could determine that a lot of M1A2 trainers were suddenly being shipped to South Korea, and logically deduce that the US Army was building up its manpower in Korea in preparation for an offensive. For this reason, the introduction of any new corporate IS database must be coordinated with the ISSO for review.

2. Oracle allows dynamic views to be created whereby different users can retrieve data from the same view but see different sets of data. This can be done utilizing the "USER" synonym, which returns the username. A security table with username and a restricting value can be built. A dynamic view can then be created which joins the base table with the security table on the restricting value, which may be (for example) an organization code. The query then matches the synonym USER to the username in the view, thus retrieving only the data that user is permitted to see.

   (EXAMPLE:

   PERSONNEL

Emp_name	Org_Code
AARDVARK, AARON A	ABC
BISON, BIFF B	DEF
CARP, CARLA C	ABC

   SECURITY

Username	Restricting_Value
SMITH	ABC
JONES	DEF

   PERSONNEL_SECURITY_VIEW
   Select * from PERSONNEL P
   Where P.Org_Code =
       (Select Restricting_Value from SECURITY
        Where Username=:USER);
   In this example, user SMITH would return AARDVARK's &

CARP's records, and user JONES would retrieve BISON fromPERSONNEL_SECURITY_VIEW

Where practical, this scheme is to be utilized to provide security.

Appendix E—Video Teleconferencing Center Procedures

This Appendix describes the policies and procedures for using the Video Teleconferencing Center (VTC).

Hours of Operation

The VTC will be open for scheduled conferences Monday through Friday except for normal federal holidays. The hours of operation are from 0730-1730. Conferences outside normal operating times need prior approval by the VTC program manager, Dr. Alan Lang at 380-8139. As much lead-time as possible is requested.

Authorized Users

      (1)   Government (Local)—all civilian and military employees of NAWCTSD, STRICOM and NAWCTSD tenant commands.

      (2)   Government (DoD)—all civilian and military employees with prior approval of the VTC Program Manager.

      (3)   Contractor—all employees of contractors who are currently under contract to NAWCTSD, or STRICOM. A local Government POC is required to be physically present during the conference.

      (4)   Other—all other users need prior approval of the VTC Program Manager before a meeting will be scheduled.

Cost

There is no cost for NAWCTSD, STRICOM or NAWCTSD tenant commands to use the VTC and communicate with another DoD agency. NAWCTSD leases the connection to the VTC network on a monthly, unlimited use basis. For contractors to communicate with us from their facility there is typically an hourly cost to the contractor and none to the Government. In some extreme cases additional charges may be incurred by the Command. Upon scheduling the conference, the facilitators will advise the conference POC of any such expense. The VTC Program Manager must approve Conferences occurring after hours by on a case-by-case basis since additional resources may be required.

Quarterly Scheduling

      (1) Video Teleconferences will be scheduled quarterly (Jan-Mar, Apr-Jun, Jul-Sep, and Oct-Dec).

      (2) The scheduling period for each quarter will start one month prior to each quarter (i.e., 1 Dec for Jan-Mar, 1 Mar for Apr-Jun, etc.). Time slots will not be guaranteed to any customer in advance of the scheduling period.

      (3) All requests will be processed on a first-come, first-served basis. Requests received before the scheduling period will not be processed, and will not be retained for future processing.

Continuous Conferences

(1) Approximately two weeks before the scheduling period, continuous conference customers will be sent a reminder to extend their conferences. (Continuous conferences are those that meet regularly at specific intervals; i.e., weekly, biweekly, etc.).

(2) Customers who cancel 50 percent of their continuous conferences will not receive a reminder for the next scheduling period and will be asked to schedule conferences only as needed.

(3) Continuous conferences will be limited to 90 minutes or less for NAVTCS sites with 65 percent usage and above.

Ad Hoc Priority Conferences

An ad hoc priority conference is a one-time urgent meeting that has a very high Command priority. In the past the NAVAIR Community of Interest (COI) has successfully operated with a "no bump" policy and has not accommodated priority conferences. However, to continue this "no bump" level of service and meet the needs of executive management, the NAVTCS policy has been recently changed as follows:

(1) A one-hour time slot each day (1200-1300) will be available for ad hoc priority meetings.

(2) Conferences will be scheduled in this time slot, but may be pre-empted if a higher priority request is received. The CO shall adjudicate Conflicts that cannot be resolved.

(3) Requests to pre-empt conferences in this time slot will be accepted no more than 5 days before the conference date.

(4) Continuous conferences will be scheduled in this time slot only as a last resort.

Pre-empting Scheduled Meetings

All of the NAVTCS VTCs adhere to the "no bump" policy (except for the daily 1-hour ad hoc priority meeting slot). If an urgent requirement for a teleconference arises for which pre-empting an already scheduled conference is necessary, the customer must submit a written "bump" request to a VTC facilitator. This request should include the date and time of the conference, sites involved, meeting subject and justification for the preemption. The local NAWCTSD facilitator will try to resolve the conflict. If the conflict cannot be resolved, the VTC facilitator will then forward the request to the CO of NAWCTSD for consideration. Upon concurrence, the CO will forward the request to NAVAIRHQ for consideration by the Commander. NAVTCS "bump" request forms are available from the VTC facilitators.

Reserving Conferences

Since the master room schedule for all the NAVTCS sites is kept and accessed through a specialized software package on a central computer at NAVAIR Headquarters, the NAVTCS network has strict procedures that must be followed by personnel using the

facilities as well as the Orlando, VTC facilitators. The following is a chronological list of events that occur while arranging a conference:

(1) The Points of Contact (POCs) at each site agree upon dates and times for a video teleconference. Each site must have a local Government POC who will be attending the meeting. At Orlando this POC must be either a NAWCTSD, or STRICOM employee, or an employee of one of the NAWCTSD tenant commands.

(2) The initiating site POC contacts their local VTC facility to request the conference.

(3) The VTC facilitator will check the availability of each site and will suggest alternate dates or times if the first choice is not available. If available, the system places a 24-hour hold on the rooms at each participating site.

(4) Once the date and time have been chosen, the initiating site POC must provide the following information to their local VTC facilitator:

(a) POC for each site (name/phone/code) (Note: Must be an authorized user)

(b) Subject of conference

(c) Security classification of conference

(d) Program supported.

This information is also entered into the NAVTCS computer system and is available to the facilitators of each site.

(5) Each site POC calls their respective VTC to confirm the conference within the 24 hour hold time period, and provides the following information:

(a) Number of participants expected

(b) Presentation support required (recording, fax, viewgraphs, slides, etc.)

Once this is done, the conference is "booked" (confirmed).

(6) The VTC facilitator will provide additional details regarding classified conferences and any charges associated with the conference.

(7) During classified conferences the POC is responsible for ensuring that all standard security procedures regarding verification of participant clearances, safeguarding conference video tape recordings, and following security procedures for the handling of classified materials, etc. are followed.

Courtesy Reminders

During each business day, the VTC facilitators will issue a reminder to each Orlando POC who has a next day conference scheduled.

Other Sites

There are over 150 Department of Defense VTC facilities with which we can communicate. The VTC can also access contractor facilities. Worldwide, over 1200

commercial VTC rooms are part of the Sprint Video Channel. For a fax listing of Sprint rooms, you may call 1-800-877-1108. A computerized index is currently being prepared to list all the DoD sites and the most frequently called Sprint sites. This capability will be on-line and available on the LAN in early Fiscal Year 94.

Further Information

For further information or to schedule a conference, contact the Orlando VTC at extension 380-8882 (8VTC).

Appendix F—National and International Standards

This Appendix lists and describes the national and international business and technical standards adopted by STRICOM and NAWCTSD for encoding, formatting, exchanging and communicating information with its agents and trading partners.

Business Data Interchange Standards

American National Standards Institute Accredited Standards Committee X.12

The American National Standards Institute (ANSI) serves in the capacity as administrator and coordinator for the voluntary standardization among industry trading partners. ANSI does not itself develop the X12 standards but facilitates development by establishing consensus among qualified groups. ANSI accredited developers are committed to supporting the development of national standards that address critical trends of technology innovation, marketplace globalization and regulatory reform. Two government standards committees control and maintain the government Implementation Conventions. The DoD EDI Standards Management Committee (DoD EDISMC) functions at the DoD level. The Federal EDI Standards Management Coordinating Committee (FESMCC) operates at the federal level.

STRICOM supprots the use of standard X12 Electronic Data Interchange (EDI) for the electronic exchange of data. STRICOM uses software product from Harbinger Corporation (http://www.harbinger.com/) for its EDI processing. Harbinger TrustedLink STMAP mapping software and STX translator software are used for mapping and translating EDI data. Harbinger Pipeline is the communication software used to transmit and receive data from the Harbinger VAN Harbinger Templar is the communication software that is used to exchange EDI data directly with trading partners over the Internet. The use of Harbinger software by STRICOM poses no requirements on STRICOM's trading partners. Any software that supports the X12 EDI standards should produce valid EDI data that can be interchanged with the software that STRICOM is using. Likewise, any software that supports tradition VAN communications or the emerging standard for EDI over the Internet can be used to exchange EDI data with STRICOM. The EDI system at STRICOM is installed using the following hardware and software:

Hardware: Compaq Deskpro EN Model 6400/6
Software: Operating System: Windows NT 4.0 SP6
            Mapping Software: Harbinger STMAP
            Translator: Harbinger Trusted Link Windows Version 4.34
            Communications: Harbinger TEMPLAR Version 4.0
            Harbinger Pipeline - (VAN Communications over the Internet)
            Pinneaple Soft Fast Mail (This utility is used to e-mail users when EDI
    transactions arrive for them)
            Scripting Components: Microsoft Visual Basic Scripting Edition
                                     Microsoft Batch Files (MS-DOS Command files)

Communications Infrastructure:

POP 3 Server: Lotus Notes Server configured as POP3 Mail Server
(Configured in separate Compaq Server)

VAN: Harbinger Net.

Transaction Sets

An EDI syntax consisting of a set of data segments, that taken together comprises a single commercial transaction. The transaction sets describe the order and format of the data to be exchanged. They contain what are called *segments* (similar to records in a database) and *data elements* (similar to fields in a record) to describe this standard format. They also use *qualifiers* to describe amounts, quantities, dates, and percentages. These qualifiers come before a value, date, or percentage to describe what the item represents; for example, actual costs, an early start date, or percentages complete.

The transaction sets define the *structure* of the data. The standards format makes it easy to program computer applications to talk directly with each other without any human interpretation of the information being exchanged.

Implementation Conventions

To put these X12 transaction sets to use, an implementation convention (IC) is also needed. These ICs spell out exactly how a transaction set is used and narrows down the information required for a specific report format.

For example, for Cost Performance Reports (CPRs,) it provides guidelines for the number of characters allowed in a Work Breakdown Structure element code and description. It specifies which qualifiers can be used for reporting such amount values as cumulative-to-date actual, budget, and earned value.

Version Coordination

Transaction sets are assigned a version and release reference number. The standards are updated on a periodic basis. For example, version release 003050 is dated December 1994, and version release 003060 is dated December 1995.

Generally, the version and releases are upwardly compatible. It is important to know which version and release of the standards are being used for the data exchange to make sure everyone is working from the same document.

United Nations Electronic Data Interchange for Administration, Commerce and Transportation (UNEDIFACT)

United Nations rules for Electronic Data Interchange for Administration, Commerce and Transport comprise a set of internationally agreed standards, directories and guidelines for the electronic interchange of structured data, and in particular that related to trade in goods and services between independent, computerized information systems.

Technical Data Interchange Standards

28000-Series

MIL-PRF-28000, Digital Representation for Communication of Product Data—MIL-PRF-28000 is the specification that defines DoD requirements for the application of the Initial Graphics Exchange Specification (IGES). This specification provides a mechanism for the digital exchange of product data among computer-aided design (CAD) and computer-aided manufacturing (CAM) systems.

MIL-PRF-28001, Markup Requirements and Generic Style Specification for Electronic Printed Output and Exchange of Text—MIL-PRF-28001 is the performance specification, which defines DoD requirements for the application of the Standard Generalized Markup Language (SGML). This specification provides a mechanism for the digital interchange of technical publications and other text data. MIL-PRF-28001 facilitates the automated storage, retrieval, interchange, and processing of technical documents from heterogeneous computer systems. SGML provides the ability to mark up (tag) textual data in a manner to define data content and document structure. SGML is the basis for HyTime (for hypertext linking of documents), Hypertext Markup Language (HTML, for electronic presentation, notably for the Worldwide Web), and eXtensible Markup Language (XML, for describing information).

MIL-PRF-28002, Raster Graphics Representation in Binary Format—MIL-PRF-28002 is the specification that defines DoD requirements for the standardized encoding and compression of raster (bit-mapped) image data. This specification provides for the digital binary representation of 2-dimensional bitonal images or pictures for display or interchange. MIL-PRF-28002 also defines data compression to reduce file size.

MIL-PRF-28003, Digital Representation for Communication of Illustration Data, CGM Application Profile—MIL-PRF-28003 is the performance specification which establishes the DoD requirements for 2-dimensional picture description or illustration data that is vector-based (or mixed vector and raster). MIL-PRF-28003 is the CALS application profile of the Computer Graphics Metafile (CGM). CGM provides a standardized electronic format for the capture, storage, retrieval, transmission, and interchange of 2-dimensional pictures, independent of system architecture, device capabilities, or transmission medium.

12.2.2 MIL-STD-1840

MIL-STD-1840, Automated Interchange of Technical Information—MIL-STD-1840 is the interface standard which defines the means for exchanging large quantities of engineering and technical support data among heterogeneous computer systems. MIL-STD-1840 is the "parent" or "umbrella" standard for CALS, because it identifies other standards, specifications, and practices to be used in a CALS solution. It applies selected Federal, DoD, International, National, and Internet standards for the exchange of digital information between organizations or systems and for the conduct of business by electronic means.

<u>12.2.3</u> <u>ISO</u> <u>10303</u>

The International Standards Organization (ISO) standard to exchange product data is called STEP (the Standard for the Exchange of Product Model data (STEP), ISO-10303. STEP is an international standard for the computer-interpretable representation and exchange of product data, providing a neutral mechanism capable of describing product data throughout the life cycle of a product, independent from any particular system. STEP is an evolving standard that will cover the whole Product Life Cycle in terms of data sharing, storage and exchange.

<u>Electronic</u> <u>Document</u> <u>Management</u>

<u>Electronic</u> <u>Document</u> <u>Management</u> <u>and</u> <u>Workflow</u>

Electronic document management provides for the electronic creation, editing, viewing, printing, faxing, storage, and retrieval of documents. Workflow is any task performed in series or in parallel by two or more members of a workgroup to reach a common goal. The pervasive use of personal computers, networks and e-mail has made it possible to automate workflow. Workflow automation systems provide the capability to design workflow maps and then use these maps to electronically route documents and other information to individuals for input, review, and/or approval.

STRICOM uses Lotus Notes to automate workflow. The Task Package Automation (TPA) is one example of this. STRICOM will use JCALS to do document management and workflow automation.

<u>Product</u> <u>Data</u> <u>Management</u>

Product data management (PDM) software helps track and manage the data associated with products throughout the entire development process. PDMs automate the functions of data capture, storage, retrieval, access control, and transmittal, as well as configuration management and quality control of data. The goal of PDM is to enable teams in large, decentralized enterprises to collaborate on the design, planning, implementation, and management of product development processes and information.

<u>Communications</u>

<u>Internet</u> <u>Protocols</u>

<u>TCP/IP</u>—Transmission Control Protocol / Internet Protocol: IP is used to route and deliver data over a network. TCP ensures reliable and properly sequenced delivery of data on a network. TCP uses IP as its underlying protocol.

<u>FTP</u>—The File Transfer Protocol allows a user on one computer to retrieve files from another computer, or to send files to another computer. FTP uses TCP/IP as its underlying protocol.

<u>HTTP</u>—The Hypertext Transfer Protocol is an application-level protocol with the lightness and speed necessary for distributed, collaborative, hypermedia information systems. HTTP has been in use by the World Wide Web since 1990. HTTP uses TCP/IP as its underlying protocol.

SSL—Secure Sockets Layer is a protocol for transmitting private (encrypted) documents via the Internet. SSL uses a private key to encrypt data that's transferred over the SSL connection.

TELNET—*UNDER CONSTRUCTION*

Web Technologies

HTML—The Hypertext Markup Language is the lingua franca for publishing hypertext on the World Wide Web. HTML provides the ability to format text and graphics in a text-only ASCII file that can be read by any computer with a program called an HTML browser. HTML documents can contain links to other documents anywhere on the World Wide Web.HTML 4.0 is World Wide Web Consortium's (W3C) recommendation for the latest version of HTML. It includes support for style sheets, internationalization; accessibility to Web pages for people with disabilities, frames, richer tables and forms.

CSS—Cascading Style Sheets describe how documents are presented on screens, in print, or perhaps how they are pronounced. By attaching style sheets to structured documents on the Web (e.g., HTML), authors and readers can influence the presentation of documents without sacrificing device-independence or adding new HTML tags. CSS is a World Wide Web Consortium (W3C) recommendation.

JavaScript—JavaScript is a lightweight, interpreted, object-based scripting language used in the development of Internet applications. JavaScript allows executable code to be embedded in web pages so that these pages can include dynamic programs that interact with the user, control the browser, and dynamically create HTML content. ECMA Script is the standardized version of JavaScript.

DOM—The Document Object Model is a platform- and language-neutral interface that will allow programs and scripts to dynamically access and update the content, structure and style of documents. The document can be further processed and the results of that processing can be incorporated back into the presented page. A specification for DOM is under development by the W3C.

DHTML—Dynamic HTML is a combination of technologies used to create dynamic content on Web pages. It uses HTML 4.0, Cascading Style Sheets and usually JavaScript together following the rules of the Document Object Model to create and change the content and presentation of a Web page.

XML—The eXtensible Markup Language is a computer language for describing information. XML is a markup language that provides a standardized framework for defining the markups (or tags). It is extensible because it can be used to define tags, not just use a pre-defined set of tags as in HTML. "XML is primarily intended to meet the requirements of large-scale Web content providers for industry-specific markup, vendor-neutral data exchange, media-independent publishing, one-on-one marketing, workflow management in collaborative authoring environments, and the processing of Web documents by intelligent clients. XML 1.0 is a recommendation of W3C.

Email

MIME—Multipurpose Internet Mail Extensions is a specification for describing the format of Internet message bodies. It defines the standard representation for "complex" message bodies. A "complex" message body does not conform to the default of a single, human-readable, ASCII mail message. The specification provides facilities that include multiple objects in a single message, to

- represent body text in character sets other than US-ASCII,

- represent formatted text messages,

- represent non-textual material such as images and audio fragments, and generally

- facilitate later extensions defining new types of Internet mail for use by cooperating mail agents.

S/MIME—Secure Multipurpose Internet Mail Extensions is a specification to transmit e-mail that is verifiably authentic, private (encrypted), and non-reputable (sender cannot deny having sent it). The S/MIME specification defines MIME encapsulation of digitally signed and encrypted objects

X.509—X.509 is a standard for defining digital certificates. A digital certificate is an attachment to an electronic message commonly used to verify that a user sending a message is who he claims to be and to provide the receiver with the means to encode a reply.

Mail Transports

POP-3—Post Office Protocol is designed for user-to-mailbox access. Facilities are provided for user authentication and mailbox manipulation. Authentication takes the form of a password transmitted as clear text, so POP3 should be used carefully if security is of concern. Note: Given the security issue, STRICOM does not support POP-3.

IMAP4—Internet Message Access Protocol, Version 4 allows a client to access and manipulate electronic mail messages on a server. IMAP4 permits manipulation of remote message folders, called "mailboxes," in a way that is functionally equivalent to local mailboxes. IMAP4 also provides the capability for an offline client to resynchronize with the server.

SMTP—Simple Mail Transfer Protocol is the Internet's standard host-to-host mail transport protocol and traditionally operates over TCP, although SMTP is independent of the particular transmission subsystem. The objective of Simple Mail Transfer Protocol (SMTP) is to transfer mail reliably and efficiently.

X.400—X.400 is a standard for addressing and transporting e-mail messages. It supports various transport mechanisms including Ethernet, X.25, TCP/IP and dial-up lines.

Value Added Networks

Value added networks or (VANS) are telecommunications networks that provide enhanced communication services among trading partners. VANS add value by routing,

storing, distribution and converting or translating messages. VANs also provide other tasks. VANs are known also as Value Added Data Service (VADS).

Use this implementation convention of the 846 transaction set to report logistic volume information.

Note:

On the segment detail pages, values that are to be entered literally are placed in quotation marks. For example, "846" means that 846 must be entered for the Transaction Set Identifier Code. Values that are variable are underlined. For example, in the REF segment, <u>CONTRACT</u> means that the contract number must be entered as the Reference Identification.

<u>Functional</u> <u>Group</u> <u>ID=</u>IB

Heading:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
4	010	ST	Transaction Set Header	M	1	
5	020	BIA	Beginning Segment for Inventory Inquiry/Advice	M	1	
Not Used	040	CUR	Currency	O	1	
Not Used	050	DTM	Date/Time Reference	O	10	
6	060	REF	Reference Identification	O	12	
Not Used	070	PER	Administrative Communications Contact	O	3	
Not Used	075	MEA	Measurements	O	20	
		Loop ID – N1				5
Not Used	080	N1	Name	O	1	
Not Used	090	N2	Additional Name Information	O	2	
Not Used	100	N3	Address Information	O	2	
Not Used	110	N4	Geographic Location	O	1	
Not Used	120	REF	Reference Identification	O	12	
Not Used	130	PER	Administrative Communications Contact	O	3	
		Loop ID - LM				10
Not Used	140	LM	Code Source Information	O	1	
Not Used	150	LQ	Industry Code	M	100	

Detail:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
		Loop ID – LIN				10000
8	010	LIN	Item Identification	M	1	
Not Used	030	PID	Product/Item Description	O	200	
Not Used	040	MEA	Measurements	O	40	
Not Used	050	PKG	Marking, Packaging, Loading	O	25	
9	100	DTM	Date/Time Reference	O	10	
Not Used	110	CTP	Pricing Information	O	25	
Not Used	120	CUR	Currency	O	1	
Not Used	130	SAC	Service, Promotion, Allowance, or Charge Information	O	25	
11	140	REF	Reference Identification	O	>1	
Not Used	150	PER	Administrative Communications Contact	O	3	
Not Used	220	SDQ	Destination Quantity	O	500	
Not Used	230	MAN	Marks and Numbers	O	1	
Not Used	235	UIT	Unit Detail	O	5	
Not Used	240	CS	Contract Summary	O	1	
Not Used	250	DD	Demand Detail	O	>1	
Not Used	255	G53	Maintenance Type	O	1	
Not Used	256	PCT	Percent Amounts	O	>1	
Not Used	257	LDT	Lead Time	O	12	
		Loop ID - LM				10
Not Used	260	LM	Code Source Information	O	1	
Not Used	270	LQ	Industry Code	M	100	
		Loop ID - SLN				1000
Not Used	280	SLN	Subline Item Detail	O	1	
Not Used	290	PID	Product/Item Description	O	200	
Not Used	300	MEA	Measurements	O	40	
Not Used	310	PKG	Marking, Packaging, Loading	O	25	
		Loop ID - MAN				100
Not Used	312	MAN	Marks and Numbers	O	1	
Not Used	314	MEA	Measurements	O	40	
		Loop ID - QTY				99
12	320	QTY	Quantity	O	1	
Not Used	330	UIT	Unit Detail	O	12	
Not Used	340	MEA	Measurements	O	25	
Not Used	350	LDT	Lead Time	O	12	
Not Used	355	DTM	Date/Time Reference	O	10	
		Loop ID - SCH				25
Not Used	360	MAN	Marks and Numbers	O	1	
Not Used	370	MEA	Measurements	O	25	
		Loop ID - LM				>1
Not Used	375	LM	Code Source Information	O	1	
Not Used	376	LQ	Industry Code	M	100	
		Loop ID – REF				>1
Not Used	390	REF	Reference Identification	O	1	
Not Used	400	DTM	Date/Time Reference	O	>1	
Not Used	410	N1	Name	O	1	
		Loop ID - LM				10
Not Used	420	LM	Code Source Information	O	1	
Not Used	430	LQ	Industry Code	M	100	
Not Used	440	LE	Loop Trailer	O	1	

Attachment 1-2

			Loop ID – REF			200
Not Used	450	N1	Name	O	1	
Not Used	460	N2	Additional Name Information	O	2	
Not Used	470	N3	Address Information	O	2	
Not Used	480	N4	Geographic Location	O	1	
Not Used	490	REF	Reference Identification	O	12	
Not Used	500	PER	Administrative Communications Contact	O	3	

Summary:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
Not Used	010	CTT	Transaction Totals	O	1	
16	020	SE	Transaction Set Trailer	M	1	

Segment:

ST Transaction Set Header

Position:	010
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of a transaction set and to assign a control number.
Syntax Notes:	
Semantic Notes:	The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition.
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**ST01**	**143**	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set	**M ID 3/3**
			"846" Inventory Inquiry Advice	
Must Use	**ST02**	**329**	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group. Assigned by the originator of a transaction set.	**M AN 4/9**

Segment:

<u>BIA</u> <u>Beginning</u> <u>Segment</u> <u>for</u> <u>Inventory</u> <u>Inquiry/Advice</u>

Position:	020
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the beginning of an Inventory Inquiry/Advice Transaction Set
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA01**	**353**	**Transaction Set Purpose Code** Code identifying purpose of a transaction set.	**M**	**ID 2/2**

<u>"00"</u>   <u>Original</u>

"77"   Simulation Exercise

Must Use	**BIA02**	**755**	**Report Type Code** Code indicating the title or contents of a document, report or supporting item.	**M**	**ID 2/2**

"TB"   Asset Status Advice

Must Use	**BIA03**	**127**	**Reference Identification** Reference information as defined for a particular transaction set or as specified by the Reference Identification Qualifier.	**M**	**AN 1/30**

<u>"Z"</u>   <u>Code</u> <u>to</u> <u>satisfy</u> <u>mandatory</u> <u>X12</u> <u>requirements</u>

Must Use	**BIA04**	**373**	**Date** Date of the transaction set preparation.	**M**	**DT 8/8**

Format: CCYYMMDD

Must Use	**BIA05**	**337**	**Time** Time of the transaction set preparation.	**O**	**TM 4/8**

Format: HHMM

| Not Used | BIA06 | 755 | Report Type Code | O | ID 1/2 |

Segment:

REF Reference Identification

Position:	060
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	2 (Use 1 of 2)
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "CT" Code for Contract Number	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Contract

Implementation Note: AN 1/17

Must Use	REF03	352	**Description**	X	AN 1/80

Site

Implementation Note: AN 1/50

Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF Reference Identification

Position: 060
Loop:
Level: Heading
Usage: Mandatory
Max Use: 2 (Use 2 of 2)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification.	M	ID 2/3
			"84" Code for CDRL		
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

CDRL ID

Implementation Note: AN 1/4

	Ref. Des.	Data Element	Name	Attributes	
Not Used	REF03	352	**Description**	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

LIN Item Identification

Position:	010
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify basic item identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Not Used	LIN01	350	Assigned Identification	O	AN 1/20
Must Use	LIN02	235	Product/Service ID Qualifier	M	ID 2/2

"ZZ"   Code for Mutually Defined

Must Use	LIN03	234	Product/Service ID	M	AN 1/48

"VOLUME COMPONENT SUMMARY"

Not Used	LIN04	235	Product/Service ID Qualifier	X	ID 2/2
Not Used	LIN05	234	Product/Service ID	X	AN 1/48
	…				
Not Used	LIN30	235	Product/Service ID Qualifier	X	ID 2/2
Not Used	LIN31	234	Product/Service ID	X	AN 1/48

Segment:

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 10 (Use 1 of 2)
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time. "090" Code for Report Start.	M	ID 3/3
Must Use	DTM02	373	**Date**	X	DT 8/8

Report Start Date

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Segment:

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 10 (Use 2 of 2)
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time.	M	ID 3/3
			"091" Code for Report End.		
Must Use	DTM02	373	**Date**	X	DT 8/8

Report End Date

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Segment:

REF Reference Identification

Position:	140
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	>1
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "PM"　Code for Part Number.	M	ID 2/3
Must Use	REF02	127	**Reference Identification** ### *Part Number* Implementation Note: AN 1/19	X	AN 1/30
Must Use	REF03	352	**Description** ### *Nomenclature* Implementation Note: AN 1/80	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

QTY <small>Quantity</small>

Position: 320
Loop: QTY (Loop 1 of 4)
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify quantity information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity. "38" Code for Original Quantity.	M	ID 2/3
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Quantity at Beginning

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY Quantity

Position:	320
Loop:	QTY (Loop 2 of 4)
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity. "87" Code for Quantity Received.	M	ID 2/3
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Quantity Inducted

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY <small>Quantity</small>

Position: 320
Loop: QTY (Loop 3 of 4)
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify quantity information
Syntax Notes:
Semantic Notes:
Comments:

<u>Data Element Summary</u>

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity. "76" Code for Returns.	M	ID 2/3
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Quantity Returned

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY _{Quantity}

Position:	320
Loop:	QTY (Loop 4 of 4)
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/3
			Code specifying the type of quantity.		
			"20" Code for Unusable Quantity.		
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Quantity Washed Out

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

SE Transaction Set Trailer

Position: 020
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of a transaction set and provide the count of the transmitted segments (including the starting (ST) and ending (SE) segments).
Syntax Notes:
Semantic Notes: SE is the last segment of each transaction set.
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	SE01	96	**Number of Included Segments**	M	N0 1/10
			Total number of segments included in a transaction set including ST and SE segments.		
Must Use	SE02	329	**Transaction Set Control Number**	M	AN 4/9
			Identifying control number that must be unique within the transaction set functional group. Assigned by the originator of a transaction set.		
			Cite the same number as the one cited in ST02.		

Use this implementation convention of the 846 transaction set to report logistic
consumable information.

Note:

**On the segment detail pages, values that are to be entered literally are placed in
quotation marks. For example, "846" means that 846 must be entered for the
Transaction Set Identifier Code. Values that are variable are underlined. For
example, in the REF segment, <u>CONTRACT</u> means that the contract number must
be entered as the Reference Identification.**

<u>Functional</u> <u>Group</u> <u>ID=</u>IB

Heading:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
	010	ST	Transaction Set Header	M	1	
5	020	BIA	Beginning Segment for Inventory Inquiry/Advice	M	1	
Not Used	040	CUR	Currency	O	1	
Not Used	050	DTM	Date/Time Reference	O	10	
6	060	REF	Reference Identification	O	12	
Not Used	070	PER	Administrative Communications Contact	O	3	
Not Used	075	MEA	Measurements	O	20	
		Loop ID – N1				5
Not Used	080	N1	Name	O	1	
Not Used	090	N2	Additional Name Information	O	2	
Not Used	100	N3	Address Information	O	2	
Not Used	110	N4	Geographic Location	O	1	
Not Used	120	REF	Reference Identification	O	12	
Not Used	130	PER	Administrative Communications Contact	O	3	
		Loop ID - LM				10
Not Used	140	LM	Code Source Information	O	1	
Not Used	150	LQ	Industry Code	M	100	

Detail:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
		Loop ID – LIN				10000
8	010	LIN	Item Identification	M	1	
Not Used	030	PID	Product/Item Description	O	200	
Not Used	040	MEA	Measurements	O	40	
Not Used	050	PKG	Marking, Packaging, Loading	O	25	
9	100	DTM	Date/Time Reference	O	10	
Not Used	110	CTP	Pricing Information	O	25	
Not Used	120	CUR	Currency	O	1	
Not Used	130	SAC	Service, Promotion, Allowance, or Charge Information	O	25	
11	140	REF	Reference Identification	O	>1	
Not Used	150	PER	Administrative Communications Contact	O	3	
Not Used	220	SDQ	Destination Quantity	O	500	
Not Used	230	MAN	Marks and Numbers	O	1	
Not Used	235	UIT	Unit Detail	O	5	
Not Used	240	CS	Contract Summary	O	1	
Not Used	250	DD	Demand Detail	O	>1	
Not Used	255	G53	Maintenance Type	O	1	
Not Used	256	PCT	Percent Amounts	O	>1	
Not Used	257	LDT	Lead Time	O	12	
		Loop ID - LM				10
Not Used	260	LM	Code Source Information	O	1	
Not Used	270	LQ	Industry Code	M	100	
		Loop ID - SLN				1000
Not Used	280	SLN	Subline Item Detail	O	1	
Not Used	290	PID	Product/Item Description	O	200	
Not Used	300	MEA	Measurements	O	40	
Not Used	310	PKG	Marking, Packaging, Loading	O	25	
		Loop ID - MAN				100
Not Used	312	MAN	Marks and Numbers	O	1	
Not Used	314	MEA	Measurements	O	40	
		Loop ID - QTY				99
20	320	QTY	Quantity	O	1	
Not Used	330	UIT	Unit Detail	O	12	
Not Used	340	MEA	Measurements	O	25	
Not Used	350	LDT	Lead Time	O	12	
Not Used	355	DTM	Date/Time Reference	O	10	
		Loop ID - SCH				25
Not Used	360	MAN	Marks and Numbers	O	1	
Not Used	370	MEA	Measurements	O	25	
		Loop ID - LM				>1
Not Used	375	LM	Code Source Information	O	1	
Not Used	376	LQ	Industry Code	M	100	
		Loop ID – REF				>1
Not Used	390	REF	Reference Identification	O	1	
Not Used	400	DTM	Date/Time Reference	O	>1	
Not Used	410	N1	Name	O	1	
		Loop ID - LM				10
Not Used	420	LM	Code Source Information	O	1	
Not Used	430	LQ	Industry Code	M	100	
Not Used	440	LE	Loop Trailer	O	1	

Attachment 2-2

		Loop ID – REF			200
Not Used	450	N1	Name	O	1
Not Used	460	N2	Additional Name Information	O	2
Not Used	470	N3	Address Information	O	2
Not Used	480	N4	Geographic Location	O	1
Not Used	490	REF	Reference Identification	O	12
Not Used	500	PER	Administrative Communications Contact	O	3

Summary:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
Not Used	010	CTT	Transaction Totals	O	1	
21	020	SE	Transaction Set Trailer	M	1	

Segment:

ST Transaction Set Header

Position:	010
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of a transaction set and to assign a control number.
Syntax Notes:	
Semantic Notes:	The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition.
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	ST01	143	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set	M	ID 3/3
			"846" Inventory Inquiry Advice		
Must Use	ST02	329	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group. Assigned by the originator of a transaction set.	M	AN 4/9

Attachment 2-5

Segment:

BIA Beginning Segment for Inventory Inquiry/Advice

Position:	020
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the beginning of an Inventory Inquiry/Advice Transaction Set
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA01**	**353**	**Transaction Set Purpose Code** Code identifying purpose of a transaction set.	**M**	**ID 2/2**
			"00"　　Original		
			"77"　　Simulation Exercise		
Must Use	**BIA02**	**755**	**Report Type Code** Code indicating the title or contents of a document, report or supporting item.	**M**	**ID 2/2**
			"TB"　　Asset Status Advice		
Must Use	**BIA03**	**127**	**Reference Identification** Reference information as defined for a particular transaction set or as specified by the Reference Identification Qualifier.	**M**	**AN 1/30**
			"Z"　　Code to satisfy mandatory X12 requirements		
Must Use	**BIA04**	**373**	**Date** Date of the transaction set preparation. Format: CCYYMMDD	**M**	**DT 8/8**
Must Use	**BIA05**	**337**	**Time** Time of the transaction set preparation. Format: HHMM	**O**	**TM 4/8**

| Not Used | BIA06 | 755 | Report Type Code | | O | ID 1/2 |

Segment:

REF <u>Reference Identification</u>

Position: 060
Loop:
Level: Heading
Usage: Mandatory
Max Use: 2 (Use 1 of 2)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "CT" Code for Contract Number	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Contract

Implementation Note: AN 1/17

Must Use	REF03	352	**Description**	X	AN 1/80

Site

Implementation Note: AN 1/50

Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF <u>Reference Identification</u>

Position: 060
Loop:
Level: Heading
Usage: Mandatory
Max Use: 2 (Use 2 of 2)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "84" Code for CDRL	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

CDRL ID

Implementation Note: AN 1/4

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF03	352	**Description**	X	AN 1/80

Location

Implementation Note: AN 1/50

	Ref. Des.	Data Element	Name	Attributes	
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

LIN Item Identification

Position:	010
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify basic item identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Not Used	LIN01	350	Assigned Identification	O	AN 1/20
Must Use	LIN02	235	Product/Service ID Qualifier	M	ID 2/2
			"ZZ" *Code for Mutually Defined*		
Must Use	LIN03	234	Product/Service ID	M	AN 1/48
			"GFE DETAIL"		
Not Used	LIN04	235	Product/Service ID Qualifier	X	ID 2/2
Not Used	LIN05	234	Product/Service ID	X	AN 1/48
	…				
Not Used	LIN30	235	Product/Service ID Qualifier	X	ID 2/2
Not Used	LIN31	234	Product/Service ID	X	AN 1/48

Segment:

DTM Date/Time Reference

Position:	100
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	1 of 2
Purpose:	To specify pertinent dates and times
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM01	374	**Date/Time Qualifier**	M	ID 3/3

Code specifying type of date or time.

"090"   Code for Report Start.

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM02	373	**Date**	X	DT 8/8

Report Start Date

Format: CCYYMMDD

	Ref. Des.	Data Element	Name		Attributes
Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Segment:

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 2 of 2
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time. "091" Code for Report End.	M	ID 3/3
Must Use	DTM02	373	**Date**	X	DT 8/8

Report End Date

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Attachment 2-12

Segment:

REF Reference Identification

Position: 060
Loop:
Level: Heading
Usage: Mandatory
Max Use: 9 (Use 1 of 9)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "SE" Code for Serial Number	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Serial Number

Implementation Note: AN 1/18

	Ref. Des.	Data Element	Name	Attributes	
Not Used	REF03	352	**Description**	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF <u>Reference</u> <u>Identification</u>

Position:	140
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	9 (Use 2 of 9)
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "PM" Code for Part Number	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Part Number

Implementation Note: AN 1/50. Required if NSN does not exist. Should be left blank if NSN exists. If an NSN value exists, this field will be ignored.

	Ref. Des.	Data Element	Name		Attributes
Must Use	REF03	352	**Description**	X	AN 1/80

Nomenclature

Implementation Note: AN 1/80

	Ref. Des.	Data Element	Name		Attributes
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF Reference Identification

Position:	140
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	9 (Use 3 of 9)
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "NS" Code for National Stock Number.	M	ID 2/3
Must Use	REF02	127	**Reference Identification** **National Stock Number (NSN)** Implementation Note: AN 1/30. Required if Part Number does not exist.	X	AN 1/30
Not Used	REF03	352	**Description**	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF <u>Reference</u> <u>Identification</u>

Position:	140
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	9 (Use 4 of 9)
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

<u>Data</u> <u>Element</u> <u>Summary</u>

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "QQ" Code for Unit Number.	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

UOI

Implementation Note: AN 1/2. This is the Unit of Issue for this GFE.

Not Used	REF03	352	**Description**	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF Reference Identification

Position:	140
Loop:	LIN
Level:	Detail
Usage:	Optional
Max Use:	9 (Use 5 of 9)
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "IX" Code for Item Number.	M	ID 2/3
Not Used	REF02	127	**Reference Identification**	X	AN 1/30
Must Use	REF03	352	**Description**	X	AN 1/80

Inventory Control Number (ICN)

Implementation Note: AN 1/50. This field is optional

Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF Reference Identification

Position: 140
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 9 (Use 6 of 9)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "T8" Code for Description of Change Code.	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Condition Code

Implementation Note: AN 1/2.

Not Used	REF03	352	**Description**	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF <u>Reference</u> <u>Identification</u>

Position:	140
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	9 (Use 7 of 9)
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

<u>Data</u> <u>Element</u> <u>Summary</u>

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "P5" Code for Position Code.	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Status Code

Implementation Note: AN 1/2.

Not Used	REF03	352	**Description**	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF Reference Identification

Position:	140
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	9 (Use 8 of 9)
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification.		
			"QY" Code for Service Performed Code.		
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Solution Code

Implementation Note: AN 1/2.

Not Used	REF03	352	**Description**	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF <u>Reference</u> <u>Identification</u>

Position: 140
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 9 (Use 9 of 9)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

<u>Data</u> <u>Element</u> <u>Summary</u>

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "R3" Code for Correction Number.	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Assistance Code

Implementation Note: AN 1/2.

Not Used	REF03	352	**Description**	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

QTY Quantity

Position: 320
Loop: QTY (Loop 1 of 1)
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify quantity information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity. "V2" Code for Available Quantity.	M	ID 2/3
Must Use	QTY02	380	**Quantity**	X	AN 1/30

GFE Info Quantity

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

<u>SE</u> <u>Transaction</u> <u>Set</u> Trailer

Position:	020
Loop:	
Level:	Summary
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the end of a transaction set and provide the count of the transmitted segments (including the starting (ST) and ending (SE) segments).
Syntax Notes:	
Semantic Notes:	SE is the last segment of each transaction set.
Comments:	

<u>Data</u> <u>Element</u> <u>Summary</u>

	Ref. Des.	Data Element	Name	Attributes	
Must Use	SE01	96	**Number of Included Segments**	M	N0 1/10
			Total number of segments included in a transaction set including ST and SE segments.		
Must Use	SE02	329	**Transaction Set Control Number**	M	AN 4/9
			Identifying control number that must be unique within the transaction set functional group. Assigned by the originator of a transaction set.		
			Cite the same number as the one cited in ST02.		

Use this implementation convention of the 846 transaction set to report logistic performance information.

Note:

On the segment detail pages, values that are to be entered literally are placed in quotation marks. For example, "846" means that 846 must be entered for the Transaction Set Identifier Code. Values that are variable are underlined. For example, in the REF segment, <u>CONTRACT</u> means that the contract number must be entered as the Reference Identification.

<u>Functional Group ID=</u>IB

Heading:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
4	010	ST	Transaction Set Header	M	1	
5	020	BIA	Beginning Segment for Inventory Inquiry/Advice	M	1	
Not Used	040	CUR	Currency	O	1	
Not Used	050	DTM	Date/Time Reference	O	10	
6	060	REF	Reference Identification	O	12	
Not Used	070	PER	Administrative Communications Contact	O	3	
Not Used	075	MEA	Measurements	O	20	
Loop ID – N1						5
Not Used	080	N1	Name	O	1	
Not Used	090	N2	Additional Name Information	O	2	
Not Used	100	N3	Address Information	O	2	
Not Used	110	N4	Geographic Location	O	1	
Not Used	120	REF	Reference Identification	O	12	
Not Used	130	PER	Administrative Communications Contact	O	3	
Loop ID - LM						10
Not Used	140	LM	Code Source Information	O	1	
Not Used	150	LQ	Industry Code	M	100	

Detail:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
			Loop ID – LIN			10000
8	010	LIN	Item Identification	M	1	
9	030	PID	Product/Item Description	O	200	
Not Used	040	MEA	Measurements	O	40	
Not Used	050	PKG	Marking, Packaging, Loading	O	25	
10	100	DTM	Date/Time Reference	O	10	
Not Used	110	CTP	Pricing Information	O	25	
Not Used	120	CUR	Currency	O	1	
Not Used	130	SAC	Service, Promotion, Allowance, or Charge Information	O	25	
12	140	REF	Reference Identification	O	>1	
Not Used	150	PER	Administrative Communications Contact	O	3	
Not Used	220	SDQ	Destination Quantity	O	500	
Not Used	230	MAN	Marks and Numbers	O	1	
Not Used	235	UIT	Unit Detail	O	5	
Not Used	240	CS	Contract Summary	O	1	
Not Used	250	DD	Demand Detail	O	>1	
Not Used	255	G53	Maintenance Type	O	1	
13	256	PCT	Percent Amounts	O	>1	
Not Used	257	LDT	Lead Time	O	12	
			Loop ID - LM			10
Not Used	260	LM	Code Source Information	O	1	
Not Used	270	LQ	Industry Code	M	100	
			Loop ID - SLN			1000
Not Used	280	SLN	Subline Item Detail	O	1	
Not Used	290	PID	Product/Item Description	O	200	
Not Used	300	MEA	Measurements	O	40	
Not Used	310	PKG	Marking, Packaging, Loading	O	25	
			Loop ID - MAN			100
Not Used	312	MAN	Marks and Numbers	O	1	
Not Used	314	MEA	Measurements	O	40	
			Loop ID - QTY			99
15	320	QTY	Quantity	O	1	
Not Used	330	UIT	Unit Detail	O	12	
Not Used	340	MEA	Measurements	O	25	
Not Used	350	LDT	Lead Time	O	12	
Not Used	355	DTM	Date/Time Reference	O	10	
			Loop ID - SCH			25
Not Used	360	MAN	Marks and Numbers	O	1	
Not Used	370	MEA	Measurements	O	25	
			Loop ID - LM			>1
Not Used	375	LM	Code Source Information	O	1	
Not Used	376	LQ	Industry Code	M	100	
			Loop ID – REF			>1
Not Used	390	REF	Reference Identification	O	1	
Not Used	400	DTM	Date/Time Reference	O	>1	
Not Used	410	N1	Name	O	1	
			Loop ID - LM			10
Not Used	420	LM	Code Source Information	O	1	
Not Used	430	LQ	Industry Code	M	100	
Not Used	440	LE	Loop Trailer	O	1	

Attachment 3-2

			Loop ID – REF			200
Not Used	450	N1	Name	O	1	
Not Used	460	N2	Additional Name Information	O	2	
Not Used	470	N3	Address Information	O	2	
Not Used	480	N4	Geographic Location	O	1	
Not Used	490	REF	Reference Identification	O	12	
Not Used	500	PER	Administrative Communications Contact	O	3	

Summary:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
Not Used	010	CTT	Transaction Totals	O	1	
21	020	SE	Transaction Set Trailer	M	1	

Segment:

ST Transaction Set Header

Position:	010
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of a transaction set and to assign a control number.
Syntax Notes:	
Semantic Notes:	The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition.
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	ST01	143	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set	M	ID 3/3
			"846" Inventory Inquiry Advice		
Must Use	ST02	329	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group. Assigned by the originator of a transaction set.	M	AN 4/9

Segment:

BIA <u>Beginning Segment for Inventory Inquiry/Advice</u>

Position:	020
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the beginning of an Inventory Inquiry/Advice Transaction Set
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA01**	**353**	**Transaction Set Purpose Code** Code identifying purpose of a transaction set.	**M**	**ID 2/2**
			<u>"00"</u> <u>Original</u> "77" Simulation Exercise		
Must Use	**BIA02**	**755**	**Report Type Code** Code indicating the title or contents of a document, report or supporting item.	**M**	**ID 2/2**
			"TB" Asset Status Advice		
Must Use	**BIA03**	**127**	**Reference Identification** Reference information as defined for a particular transaction set or as specified by the Reference Identification Qualifier.	**M**	**AN 1/30**
			<u>"Z"</u> <u>Code to satisfy mandatory X12 requirements</u>		
Must Use	**BIA04**	**373**	**Date** Date of the transaction set preparation. Format: CCYYMMDD	**M**	**DT 8/8**
Must Use	**BIA05**	**337**	**Time** Time of the transaction set preparation. Format: HHMM	**O**	**TM 4/8**

| Not Used | BIA06 | 755 | Report Type Code | | O | ID 1/2 |

REF Reference Identification

Position:	060
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	2 (Use 1 of 2)
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "CT" Code for Contract Number	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Contract

Implementation Note: AN 1/17

Must Use	REF03	352	**Description**	X	AN 1/80

Site

Implementation Note: AN 1/50

Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF <u>Reference</u> <u>Identification</u>

Position: 060
Loop:
Level: Heading
Usage: Mandatory
Max Use: 2 (Use 2 of 2)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "84" Code for CDRL	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

CDRL ID

Implementation Note: AN 1/4

Must Use	REF03	352	**Description**	X	AN 1/80

Location

Implementation Note: AN 1/50

Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

LIN Item Identification

Position: 010
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify basic item identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Not Used	LIN01	350	Assigned Identification	O	AN 1/20
Must Use	LIN02	235	Product/Service ID Qualifier	M	ID 2/2

"ZZ"   Code for Mutually Defined

Must Use	LIN03	234	Product/Service ID	M	AN 1/48

"TADSS DETAIL"

Not Used	LIN04	235	Product/Service ID Qualifier	X	ID 2/2
Not Used	LIN05	234	Product/Service ID	X	AN 1/48
	…				
Not Used	LIN30	235	Product/Service ID Qualifier	X	ID 2/2
Not Used	LIN31	234	Product/Service ID	X	AN 1/48

Segment:

PID Product/Item Description

Position:	030
Loop:	
Level:	Detail
Usage:	Mandatory
Max Use:	25
	Implementation note: Comments can be up to 2000 characters long.
Purpose:	To describe a product or process in coded or free-form format
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	**PID01**	**349**	**Item Description Type**	**M**	**ID 1/1**
			"F" Code for Free-form		
Not Used	**PID02**	**750**	**Product/Process Characteristic Code**	**O**	**ID 2/3**
Not Used	**PID03**	**559**	**Agency Qualifier Code**	**X**	**ID 2/2**
Not Used	**PID04**	**751**	**Product Description Code**	**X**	**AN 1/12**
Must Use	**PID05**	**352**	**Description**	**X**	**AN 1/80**
			Comments		
Not Used	**PID06**	**752**	**Reference Identification**	**O**	**ID 2/2**
Not Used	**PID07**	**822**	**Reference Identification Qualifier**	**O**	**AN 1/15**
Not Used	**PID08**	**1073**	**Reference Identification**	**O**	**ID 1/1**

Segment:

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 2 (Use 1 of 2)
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time. "090" Code for Report Start.	M	ID 3/3
Must Use	DTM02	373	**Date**	X	DT 8/8

Report Start Date

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Segment:

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 2 (Use 2 of 2)
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time.	M	ID 3/3
			"091" Code for Report End.		
Must Use	DTM02	373	**Date**	X	DT 8/8

Report End Date

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Segment:

REF <u>Reference</u> <u>Identification</u>

Position:	060
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

<u>*Data Element Summary*</u>

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "SE" Code for Serial Number	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Serial Number

Implementation Note: AN 1/18

Not Used	REF03	352	**Description**	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

PCT Percent Amounts

Position:	256
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	2 (Use 1 of 2)
Purpose:	To qualify and supply percent amounts
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	PCT01	1004	**Percent Qualifier** Code qualifying the Percent. "14" Code for Availability Factor.	M	ID 1/2
Must Use	PCT02	954	**Percent**	M	R 1/10

Available Rate

Implementation Note: Must be between 0 and 100 inclusive.

Segment:

PCT Percent Amounts

Position:	256
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	2 (Use 2 of 2)
Purpose:	To qualify and supply percent amounts
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	PCT01	1004	**Percent Qualifier**	M	ID 1/2
			Code qualifying the Percent.		
			"18" Code for Percent of Value.		
Must Use	PCT02	954	**Percent**	M	R 1/10

Utilization Rate

Implementation Note: Must be between 0 and 100 inclusive.

Segment:

QTY Quantity

Position:	320
Loop:	QTY (Loop 1 of 6)
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/3
			Code specifying the type of quantity.		
			"ST" Code for Standard.		
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Required Available Hrs

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY <small>Quantity</small>

Position: 320
Loop: QTY (Loop 2 of 6)
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify quantity information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity. "94" Code for Billable Quantity.	M	ID 2/3
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Chargeable Downtime Hrs

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY Quantity

Position: 320
Loop: QTY (Loop 3 of 6)
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify quantity information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/3
			Code specifying the type of quantity.		
			"96" Code for Non-Billable Quantity.		
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Nonchargeable Downtime Hrs

	Ref. Des.	Data Element	Name		Attributes
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY _{Quantity}

Position:	320
Loop:	QTY (Loop 4 of 6)
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/3
			Code specifying the type of quantity.		
			"TC" Code for Total at Complete.		
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Fully Mission Capable Hrs

	Ref. Des.	Data Element	Name		Attributes
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY Quantity

Position:	320
Loop:	QTY (Loop 5 of 6)
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/3
			Code specifying the type of quantity.		
			"PE" Code for Period of Employment.		
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Partially Mission Capable Hrs

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY _{Quantity}

Position: 320
Loop: QTY (Loop 6 of 6)
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify quantity information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/3
			Code specifying the type of quantity.		
			"AT" Code for Actual.		
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Actual Hrs Utilized

	Ref. Des.	Data Element	Name		Attributes
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

SE Transaction Set Trailer

Position:	020
Loop:	
Level:	Summary
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the end of a transaction set and provide the count of the transmitted segments (including the starting (ST) and ending (SE) segments).
Syntax Notes:	
Semantic Notes:	SE is the last segment of each transaction set.
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	SE01	96	**Number of Included Segments**	M	N0 1/10
			Total number of segments included in a transaction set including ST and SE segments.		
Must Use	SE02	329	**Transaction Set Control Number**	M	AN 4/9
			Identifying control number that must be unique within the transaction set functional group. Assigned by the originator of a transaction set.		
			Cite the same number as the one cited in ST02.		

Use this implementation convention of the 846 transaction set to report logistic performance information.

Note:

On the segment detail pages, values that are to be entered literally are placed in quotation marks. For example, "846" means that 846 must be entered for the Transaction Set Identifier Code. Values that are variable are underlined. For example, in the REF segment, <u>CONTRACT</u> means that the contract number must be entered as the Reference Identification.

<u>Functional</u> <u>Group</u> <u>ID=</u>IB

Heading:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
4	010	ST	Transaction Set Header	M	1	
5	020	BIA	Beginning Segment for Inventory Inquiry/Advice	M	1	
Not Used	040	CUR	Currency	O	1	
Not Used	050	DTM	Date/Time Reference	O	10	
6	060	REF	Reference Identification	O	12	
Not Used	070	PER	Administrative Communications Contact	O	3	
Not Used	075	MEA	Measurements	O	20	
Loop ID – N1						5
Not Used	080	N1	Name	O	1	
Not Used	090	N2	Additional Name Information	O	2	
Not Used	100	N3	Address Information	O	2	
Not Used	110	N4	Geographic Location	O	1	
Not Used	120	REF	Reference Identification	O	12	
Not Used	130	PER	Administrative Communications Contact	O	3	
Loop ID - LM						10
Not Used	140	LM	Code Source Information	O	1	
Not Used	150	LQ	Industry Code	M	100	

Detail:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
		Loop ID – LIN				10000
8	010	LIN	Item Identification	M	1	
Not Used	030	PID	Product/Item Description	O	200	
Not Used	040	MEA	Measurements	O	40	
Not Used	050	PKG	Marking, Packaging, Loading	O	25	
9	100	DTM	Date/Time Reference	O	10	
Not Used	110	CTP	Pricing Information	O	25	
Not Used	120	CUR	Currency	O	1	
Not Used	130	SAC	Service, Promotion, Allowance, or Charge Information	O	25	
11	140	REF	Reference Identification	O	>1	
Not Used	150	PER	Administrative Communications Contact	O	3	
Not Used	220	SDQ	Destination Quantity	O	500	
Not Used	230	MAN	Marks and Numbers	O	1	
Not Used	235	UIT	Unit Detail	O	5	
Not Used	240	CS	Contract Summary	O	1	
Not Used	250	DD	Demand Detail	O	>1	
Not Used	255	G53	Maintenance Type	O	1	
Not Used	256	PCT	Percent Amounts	O	>1	
Not Used	257	LDT	Lead Time	O	12	
		Loop ID - LM				10
Not Used	260	LM	Code Source Information	O	1	
Not Used	270	LQ	Industry Code	M	100	
		Loop ID - SLN				1000
Not Used	280	SLN	Subline Item Detail	O	1	
Not Used	290	PID	Product/Item Description	O	200	
Not Used	300	MEA	Measurements	O	40	
Not Used	310	PKG	Marking, Packaging, Loading	O	25	
		Loop ID - MAN				100
Not Used	312	MAN	Marks and Numbers	O	1	
Not Used	314	MEA	Measurements	O	40	
		Loop ID - QTY				99
12	320	QTY	Quantity	O	1	
Not Used	330	UIT	Unit Detail	O	12	
Not Used	340	MEA	Measurements	O	25	
Not Used	350	LDT	Lead Time	O	12	
Not Used	355	DTM	Date/Time Reference	O	10	
		Loop ID - SCH				25
Not Used	360	MAN	Marks and Numbers	O	1	
Not Used	370	MEA	Measurements	O	25	
		Loop ID - LM				>1
Not Used	375	LM	Code Source Information	O	1	
Not Used	376	LQ	Industry Code	M	100	
		Loop ID – REF				>1
Not Used	390	REF	Reference Identification	O	1	
Not Used	400	DTM	Date/Time Reference	O	>1	
Not Used	410	N1	Name	O	1	
		Loop ID - LM				10
Not Used	420	LM	Code Source Information	O	1	
Not Used	430	LQ	Industry Code	M	100	
Not Used	440	LE	Loop Trailer	O	1	

Attachment 4-2

		Loop ID – REF				200
Not Used	450	N1	Name	O	1	
Not Used	460	N2	Additional Name Information	O	2	
Not Used	470	N3	Address Information	O	2	
Not Used	480	N4	Geographic Location	O	1	
Not Used	490	REF	Reference Identification	O	12	
Not Used	500	PER	Administrative Communications Contact	O	3	

Summary:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
Not Used	010	CTT	Transaction Totals	O	1	
19	020	SE	Transaction Set Trailer	M	1	

Segment:

ST Transaction Set Header

Position:	010
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of a transaction set and to assign a control number.
Syntax Notes:	
Semantic Notes:	The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition.
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	ST01	143	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set	M	ID 3/3
			"846" Inventory Inquiry Advice		
Must Use	ST02	329	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group. Assigned by the originator of a transaction set.	M	AN 4/9

Segment:

BIA <u>Beginning Segment for Inventory Inquiry/Advice</u>

Position:	020
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the beginning of an Inventory Inquiry/Advice Transaction Set
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA01**	**353**	**Transaction Set Purpose Code** Code identifying purpose of a transaction set.	**M**	**ID 2/2**

<u>"00"</u>   <u>Original</u>

"77"   Simulation Exercise

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA02**	**755**	**Report Type Code** Code indicating the title or contents of a document, report or supporting item.	**M**	**ID 2/2**

"TB"   Asset Status Advice

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA03**	**127**	**Reference Identification** Reference information as defined for a particular transaction set or as specified by the Reference Identification Qualifier.	**M**	**AN 1/30**

<u>"Z"</u>   <u>Code to satisfy mandatory X12 requirements</u>

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA04**	**373**	**Date** Date of the transaction set preparation.	**M**	**DT 8/8**

Format: CCYYMMDD

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA05**	**337**	**Time** Time of the transaction set preparation.	**O**	**TM 4/8**

Format: HHMM

Not Used	BIA06	755	Report Type Code	O	ID 1/2

Segment:

REF Reference Identification

Position: 060
Loop:
Level: Heading
Usage: Mandatory
Max Use: 2 (Use 1 of 2)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "CT" Code for Contract Number	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Contract

Implementation Note: AN 1/17

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF03	352	**Description**	X	AN 1/80

Site

Implementation Note: AN 1/50

	Ref. Des.	Data Element	Name	Attributes	
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF <u>Reference Identification</u>

Position: 060
Loop:
Level: Heading
Usage: Mandatory
Max Use: 2 (Use 1 of 2)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification.		
			"84" Code for CDRL		
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

CDRL ID

Implementation Note: AN 1/4

	Ref. Des.	Data Element	Name		Attributes
Not Used	REF03	352	**Description**	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

LIN Item Identification

Position: 010
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify basic item identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Not Used	LIN01	350	Assigned Identification	O	AN 1/20
Must Use	LIN02	235	Product/Service ID Qualifier	M	ID 2/2

"ZZ"   Code for Mutually Defined

Must Use	LIN03	234	Product/Service ID	M	AN 1/48

"COMS SUMMARY"

Not Used	LIN04	235	Product/Service ID Qualifier	X	ID 2/2
Not Used	LIN05	234	Product/Service ID	X	AN 1/48
	…				
Not Used	LIN30	235	Product/Service ID Qualifier	X	ID 2/2
Not Used	LIN31	234	Product/Service ID	X	AN 1/48

Segment:

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 2 (Use 1 of 2)
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time. "090" Code for Report Start.	M	ID 3/3
Must Use	DTM02	373	**Date**	X	DT 8/8

Report Start Date

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 2 (Use 2 of 2)
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time. "091" Code for Report End.	M	ID 3/3
Must Use	DTM02	373	**Date**	X	DT 8/8

Report End Date

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Segment:

REF <u>Reference</u> <u>Identification</u>

Position:	060
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "SE" Code for Serial Number	M	ID 2/3
Must Use	REF02	127	**Reference Identification** ### ***Serial Number*** Implementation Note: AN 1/18	X	AN 1/30
Not Used	REF03	352	**Description**	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

QTY Quantity

Position: 320
Loop: QTY (Loop 1 of 7)
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify quantity information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity. "QO" Code for Operating Quantity.	M	ID 2/3
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Operational Hrs

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY Quantity

Position:	320
Loop:	QTY (Loop 2 of 7)
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/3
			Code specifying the type of quantity.		
			"AD" Code for Maintenance Units.		
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Maintenance Hrs

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY <small>Quantity</small>

Position: 320
Loop: QTY (Loop 3 of 7)
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify quantity information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity. "QU" Code for Quantity Serviced.	M	ID 2/3
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Supply Hrs

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY Quantity

Position:	320
Loop:	QTY (Loop 4 of 7)
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity. "TP" Code for Time in Position.	M	ID 2/3
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Training Hrs

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY <small>Quantity</small>

Position:	320
Loop:	QTY (Loop 5 of 7)
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/3

Code specifying the type of quantity.

"MA"   Code for Miscellaneous Allowance.

Must Use	QTY02	380	**Quantity**	X	AN 1/30

Mgt Admin Hrs

Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY Quantity

Position:	320
Loop:	QTY (Loop 6 of 7)
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/3
			Code specifying the type of quantity.		
			"A5" Code for Adjusted Quantity.		
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Modification Hrs

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY Quantity

Position:	320
Loop:	QTY (Loop 7 of 7)
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/3
			Code specifying the type of quantity.		
			"OD" Code for Other Miscellaneous Disposition.		
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Other Hrs

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

SE Transaction Set Trailer

Position:	020
Loop:	
Level:	Summary
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the end of a transaction set and provide the count of the transmitted segments (including the starting (ST) and ending (SE) segments).
Syntax Notes:	
Semantic Notes:	SE is the last segment of each transaction set.
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	SE01	96	**Number of Included Segments** Total number of segments included in a transaction set including ST and SE segments.	M	N0 1/10
Must Use	SE02	329	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group. Assigned by the originator of a transaction set. Cite the same number as the one cited in ST02.	M	AN 4/9

Use this implementation convention of the 846 transaction set to report logistic serialized information.

Note:

On the segment detail pages, values that are to be entered literally are placed in quotation marks. For example, "846" means that 846 must be entered for the Transaction Set Identifier Code. Values that are variable are underlined. For example, in the REF segment, <u>CONTRACT</u> means that the contract number must be entered as the Reference Identification.

Functional Group ID=IB

Heading:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
4	010	ST	Transaction Set Header	M	1	
5	020	BIA	Beginning Segment for Inventory Inquiry/Advice	M	1	
Not Used	040	CUR	Currency	O	1	
Not Used	050	DTM	Date/Time Reference	O	10	
6	060	REF	Reference Identification	O	12	
Not Used	070	PER	Administrative Communications Contact	O	3	
Not Used	075	MEA	Measurements	O	20	
		Loop ID – N1				5
Not Used	080	N1	Name	O	1	
Not Used	090	N2	Additional Name Information	O	2	
Not Used	100	N3	Address Information	O	2	
Not Used	110	N4	Geographic Location	O	1	
Not Used	120	REF	Reference Identification	O	12	
Not Used	130	PER	Administrative Communications Contact	O	3	
		Loop ID - LM				10
Not Used	140	LM	Code Source Information	O	1	
Not Used	150	LQ	Industry Code	M	100	

Detail:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
		Loop ID – LIN				10000
8	010	LIN	Item Identification	M	1	
9	030	PID	Product/Item Description	O	200	
Not Used	040	MEA	Measurements	O	40	
Not Used	050	PKG	Marking, Packaging, Loading	O	25	
10	100	DTM	Date/Time Reference	O	10	
Not Used	110	CTP	Pricing Information	O	25	
Not Used	120	CUR	Currency	O	1	
Not Used	130	SAC	Service, Promotion, Allowance, or Charge Information	O	25	
15	140	REF	Reference Identification	O	>1	
Not Used	150	PER	Administrative Communications Contact	O	3	
Not Used	220	SDQ	Destination Quantity	O	500	
Not Used	230	MAN	Marks and Numbers	O	1	
Not Used	235	UIT	Unit Detail	O	5	
Not Used	240	CS	Contract Summary	O	1	
Not Used	250	DD	Demand Detail	O	>1	
Not Used	255	G53	Maintenance Type	O	1	
Not Used	256	PCT	Percent Amounts	O	>1	
Not Used	257	LDT	Lead Time	O	12	
		Loop ID - LM				10
Not Used	260	LM	Code Source Information	O	1	
Not Used	270	LQ	Industry Code	M	100	
		Loop ID - SLN				1000
Not Used	280	SLN	Subline Item Detail	O	1	
Not Used	290	PID	Product/Item Description	O	200	
Not Used	300	MEA	Measurements	O	40	
Not Used	310	PKG	Marking, Packaging, Loading	O	25	
		Loop ID - MAN				100
Not Used	312	MAN	Marks and Numbers	O	1	
Not Used	314	MEA	Measurements	O	40	
		Loop ID - QTY				99
Not Used	320	QTY	Quantity	O	1	
Not Used	330	UIT	Unit Detail	O	12	
Not Used	340	MEA	Measurements	O	25	
Not Used	350	LDT	Lead Time	O	12	
Not Used	355	DTM	Date/Time Reference	O	10	
		Loop ID - SCH				25
Not Used	360	MAN	Marks and Numbers	O	1	
Not Used	370	MEA	Measurements	O	25	
		Loop ID - LM				>1
Not Used	375	LM	Code Source Information	O	1	
Not Used	376	LQ	Industry Code	M	100	
		Loop ID – REF				>1
Not Used	390	REF	Reference Identification	O	1	
Not Used	400	DTM	Date/Time Reference	O	>1	
Not Used	410	N1	Name	O	1	
		Loop ID - LM				10
Not Used	420	LM	Code Source Information	O	1	
Not Used	430	LQ	Industry Code	M	100	
Not Used	440	LE	Loop Trailer	O	1	

Attachment 5-2

		Loop ID – REF				200
Not Used	450	N1	Name	O	1	
Not Used	460	N2	Additional Name Information	O	2	
Not Used	470	N3	Address Information	O	2	
Not Used	480	N4	Geographic Location	O	1	
Not Used	490	REF	Reference Identification	O	12	
Not Used	500	PER	Administrative Communications Contact	O	3	

Summary:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
Not Used	010	CTT	Transaction Totals	O	1	
18	020	SE	Transaction Set Trailer	M	1	

Segment:

<u>ST</u> <u>Transaction</u> <u>Set</u> <u>Header</u>

Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number.
Syntax Notes:
Semantic Notes: The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition.
Comments:

<u>Data</u> <u>Element</u> <u>Summary</u>

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**ST01**	**143**	**Transaction Set Identifier Code**	**M**	**ID 3/3**
			Code uniquely identifying a Transaction Set		
			<u>"846"</u> <u>Inventory</u> <u>Inquiry</u> <u>Advice</u>		
Must Use	**ST02**	**329**	**Transaction Set Control Number**	**M**	**AN 4/9**
			Identifying control number that must be unique within the transaction set functional group. Assigned by the originator of a transaction set.		

Attachment 5-4

Segment:

BIA <u>Beginning</u> <u>Segment</u> <u>for</u> <u>Inventory</u> <u>Inquiry/Advice</u>

Position:	020
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the beginning of an Inventory Inquiry/Advice Transaction Set
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**BIA01**	**353**	**Transaction Set Purpose Code** Code identifying purpose of a transaction set.	**M ID 2/2**

 <u>"00"</u>   <u>Original</u>

 "77"   Simulation Exercise

Must Use	**BIA02**	**755**	**Report Type Code** Code indicating the title or contents of a document, report or supporting item.	**M ID 2/2**

 "TB"   Asset Status Advice

Must Use	**BIA03**	**127**	**Reference Identification** Reference information as defined for a particular transaction set or as specified by the Reference Identification Qualifier.	**M AN 1/30**

 <u>"Z"</u>   <u>Code</u> <u>to</u> <u>satisfy</u> <u>mandatory</u> <u>X12</u> <u>requirements</u>

Must Use	**BIA04**	**373**	**Date** Date of the transaction set preparation.	**M DT 8/8**

 Format: CCYYMMDD

Must Use	**BIA05**	**337**	**Time** Time of the transaction set preparation.	**O TM 4/8**

 Format: HHMM

Attachment 5-5

| Not Used | BIA06 | 755 | Report Type Code | | O | ID 1/2 |

Segment:

REF <u>Reference Identification</u>

Position: 060
Loop:
Level: Heading
Usage: Mandatory
Max Use: 2 (Use 1 of 2)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification.		
			"CT" Code for Contract Number		
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Contract

Implementation Note: AN 1/17

Must Use	REF03	352	**Description**	X	AN 1/80

Site

Implementation Note: AN 1/50

Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF <u>Reference</u> <u>Identification</u>

Position: 060
Loop:
Level: Heading
Usage: Mandatory
Max Use: 2 (Use 2 of 2)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "84" Code for CDRL	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

CDRL ID

Implementation Note: AN 1/4

Must Use	REF03	352	**Description**	X	AN 1/80

Location

Implementation Note: AN 1/50

Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

LIN Item Identification

Position:	010
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify basic item identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Not Used	LIN01	350	**Assigned Identification**	O	**AN 1/20**
Must Use	LIN02	235	**Product/Service ID Qualifier**	M	**ID 2/2**

"ZZ"   Code for Mutually Defined

	Ref. Des.	Data Element	Name	Attributes	
Must Use	LIN03	234	**Product/Service ID**	M	**AN 1/48**

"SERIALIZED COMPONENT DETAIL"

	Ref. Des.	Data Element	Name	Attributes	
Not Used	LIN04	235	**Product/Service ID Qualifier**	X	**ID 2/2**
Not Used	LIN05	234	**Product/Service ID**	X	**AN 1/48**
Not Used	LIN06	235	**Product/Service ID Qualifier**	X	**ID 2/2**
Not Used	LIN07	234	**Product/Service ID**	X	**AN 1/48**
	…				
Not Used	LIN30	235	**Product/Service ID Qualifier**	X	**ID 2/2**
Not Used	LIN31	234	**Product/Service ID**	X	**AN 1/48**

Segment:

PID Product/Item Description

Position:	030
Loop:	
Level:	Detail
Usage:	Mandatory
Max Use:	25
	Implementation Note: Failure description can be up to 2000 characters long.
Purpose:	To describe a product or process in coded or free-form format
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**PID01**	**349**	**Item Description Type**	**M**	**ID 1/1**
			"F" Code for Free-form		
Not Used	**PID02**	**750**	**Product/Process Characteristic Code**	**O**	**ID 2/3**
Not Used	**PID03**	**559**	**Agency Qualifier Code**	**X**	**ID 2/2**
Not Used	**PID04**	**751**	**Product Description Code**	**X**	**AN 1/12**
Must Use	**PID05**	**352**	**Description**	**X**	**AN 1/80**
			Failure Description		
Not Used	**PID06**	**752**	**Reference Identification**	**O**	**ID 2/2**
Not Used	**PID07**	**822**	**Reference Identification Qualifier**	**O**	**AN 1/15**
Not Used	**PID08**	**1073**	**Reference Identification**	**O**	**ID 1/1**

Segment:

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 10 (Use 1 of 5)
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time. "090" Code for Report Start.	M	ID 3/3
Must Use	DTM02	373	**Date**	X	DT 8/8

Report Start Date

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Segment:

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 10 (Use 2 of 5)
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time.	M	ID 3/3
			"091" Code for Report End.		
Must Use	DTM02	373	**Date**	X	DT 8/8

Report End Date

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Attachment 5-12

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 10 (Use 3 of 5)
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time. "150" Code for Service Period End.	M	ID 3/3
Must Use	DTM02	373	**Date**	X	DT 8/8

Out of Service

Format: CCYYMMDD

	Ref. Des.	Data Element	Name	Attributes	
Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Segment:

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 10 (Use 4 of 5)
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time. "151" Code for Service Period End.	M	ID 3/3
Must Use	DTM02	373	**Date**	X	DT 8/8

Returned to Service

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Segment:

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 10 (Use 5 of 5)
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time. "811" Code for Rebuilt.	M	ID 3/3
Must Use	DTM02	373	**Date**	X	DT 8/8

Spare in Service

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Segment:

REF Reference Identification

Position: 060
Loop:
Level: Heading
Usage: Mandatory
Max Use: 3 (Use 1 of 3)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "SE" Code for Serial Number	M	ID 2/3
Must Use	REF02	127	**Reference Identification** ### *Serial Number (system)* Implementation Note: AN 1/18	X	AN 1/30
Must Use	REF03	352	**Description** ### *Serial Number (component)* Implementation Note: AN 1/18	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF <u>Reference</u> <u>Identification</u>

Position: 140
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 3 (Use 2 of 3)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

<u>Data Element Summary</u>

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "PM" Code for Part Number.	M	ID 2/3
Must Use	REF02	127	**Reference Identification** ### *Part Number* Implementation Note: AN 1/19	X	AN 1/30
Must Use	REF03	352	**Description** ### *Nomenclature* Implementation Note: AN 1/80	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF Reference Identification

Position: 140
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 3 (Use 3 of 3)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "WO" Code for Work Order Number.	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Contractor Workorder Num

Implementation Note: AN 1/18

Must Use	REF03	352	**Description**	X	AN 1/80

Washout

Implementation Note: AN 1/1. Valid values are "Y" or "N".

Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

SE Transaction Set Trailer

Position: 020
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of a transaction set and provide the count of the transmitted segments (including the starting (ST) and ending (SE) segments).
Syntax Notes:
Semantic Notes: SE is the last segment of each transaction set.
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**SE01**	**96**	**Number of Included Segments**	**M**	**N0 1/10**
			Total number of segments included in a transaction set including ST and SE segments.		
Must Use	**SE02**	**329**	**Transaction Set Control Number**	**M**	**AN 4/9**
			Identifying control number that must be unique within the transaction set functional group. Assigned by the originator of a transaction set.		
			Cite the same number as the one cited in ST02.		

Use this implementation convention of the 846 transaction set to report logistic consumable information.

Note:

On the segment detail pages, values that are to be entered literally are placed in quotation marks. For example, "846" means that 846 must be entered for the Transaction Set Identifier Code. Values that are variable are underlined. For example, in the REF segment, <u>CONTRACT</u> means that the contract number must be entered as the Reference Identification.

<u>Functional</u> <u>Group</u> <u>ID=</u>IB

Heading:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
4	010	ST	Transaction Set Header	M	1	
5	020	BIA	Beginning Segment for Inventory Inquiry/Advice	M	1	
Not Used	040	CUR	Currency	O	1	
Not Used	050	DTM	Date/Time Reference	O	10	
6	060	REF	Reference Identification	O	12	
Not Used	070	PER	Administrative Communications Contact	O	3	
Not Used	075	MEA	Measurements	O	20	
			Loop ID – N1			5
Not Used	080	N1	Name	O	1	
Not Used	090	N2	Additional Name Information	O	2	
Not Used	100	N3	Address Information	O	2	
Not Used	110	N4	Geographic Location	O	1	
Not Used	120	REF	Reference Identification	O	12	
Not Used	130	PER	Administrative Communications Contact	O	3	
			Loop ID - LM			10
Not Used	140	LM	Code Source Information	O	1	
Not Used	150	LQ	Industry Code	M	100	

Detail:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
			Loop ID – LIN			10000
8	010	LIN	Item Identification	M	1	
Not Used	030	PID	Product/Item Description	O	200	
Not Used	040	MEA	Measurements	O	40	
Not Used	050	PKG	Marking, Packaging, Loading	O	25	
9	100	DTM	Date/Time Reference	O	10	
Not Used	110	CTP	Pricing Information	O	25	
Not Used	120	CUR	Currency	O	1	
Not Used	130	SAC	Service, Promotion, Allowance, or Charge Information	O	25	
11	140	REF	Reference Identification	O	>1	
Not Used	150	PER	Administrative Communications Contact	O	3	
Not Used	220	SDQ	Destination Quantity	O	500	
Not Used	230	MAN	Marks and Numbers	O	1	
Not Used	235	UIT	Unit Detail	O	5	
Not Used	240	CS	Contract Summary	O	1	
Not Used	250	DD	Demand Detail	O	>1	
Not Used	255	G53	Maintenance Type	O	1	
Not Used	256	PCT	Percent Amounts	O	>1	
Not Used	257	LDT	Lead Time	O	12	
			Loop ID - LM			10
Not Used	260	LM	Code Source Information	O	1	
Not Used	270	LQ	Industry Code	M	100	
			Loop ID - SLN			1000
Not Used	280	SLN	Subline Item Detail	O	1	
Not Used	290	PID	Product/Item Description	O	200	
Not Used	300	MEA	Measurements	O	40	
Not Used	310	PKG	Marking, Packaging, Loading	O	25	
			Loop ID - MAN			100
Not Used	312	MAN	Marks and Numbers	O	1	
Not Used	314	MEA	Measurements	O	40	
			Loop ID - QTY			99
12	320	QTY	Quantity	O	1	
Not Used	330	UIT	Unit Detail	O	12	
Not Used	340	MEA	Measurements	O	25	
Not Used	350	LDT	Lead Time	O	12	
Not Used	355	DTM	Date/Time Reference	O	10	
			Loop ID - SCH			25
Not Used	360	MAN	Marks and Numbers	O	1	
Not Used	370	MEA	Measurements	O	25	
			Loop ID - LM			>1
Not Used	375	LM	Code Source Information	O	1	
Not Used	376	LQ	Industry Code	M	100	
			Loop ID – REF			>1
Not Used	390	REF	Reference Identification	O	1	
Not Used	400	DTM	Date/Time Reference	O	>1	
Not Used	410	N1	Name	O	1	
			Loop ID - LM			10
Not Used	420	LM	Code Source Information	O	1	
Not Used	430	LQ	Industry Code	M	100	
Not Used	440	LE	Loop Trailer	O	1	

Attachment 6-2

		Loop ID – REF				200
Not Used	450	N1	Name	O	1	
Not Used	460	N2	Additional Name Information	O	2	
Not Used	470	N3	Address Information	O	2	
Not Used	480	N4	Geographic Location	O	1	
Not Used	490	REF	Reference Identification	O	12	
Not Used	500	PER	Administrative Communications Contact	O	3	

Summary:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
Not Used	010	CTT	Transaction Totals	O	1	
14	020	SE	Transaction Set Trailer	M	1	

Segment:

ST Transaction Set Header

Position:	010
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of a transaction set and to assign a control number.
Syntax Notes:	
Semantic Notes:	The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition.
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	ST01	143	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set	M	ID 3/3
			"846" Inventory Inquiry Advice		
Must Use	ST02	329	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group. Assigned by the originator of a transaction set.	M	AN 4/9

Attachment 6-4

Segment:

BIA <u>Beginning Segment for Inventory Inquiry/Advice</u>

Position:	020
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the beginning of an Inventory Inquiry/Advice Transaction Set
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA01**	**353**	**Transaction Set Purpose Code** Code identifying purpose of a transaction set.	**M**	**ID 2/2**

"00" <u>Original</u>

"77" Simulation Exercise

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA02**	**755**	**Report Type Code** Code indicating the title or contents of a document, report or supporting item.	**M**	**ID 2/2**

"TB" Asset Status Advice

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA03**	**127**	**Reference Identification** Reference information as defined for a particular transaction set or as specified by the Reference Identification Qualifier.	**M**	**AN 1/30**

"Z" <u>Code to satisfy mandatory X12 requirements</u>

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA04**	**373**	**Date** Date of the transaction set preparation.	**M**	**DT 8/8**

Format: CCYYMMDD

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**BIA05**	**337**	**Time** Time of the transaction set preparation.	**O**	**TM 4/8**

Format: HHMM

Not Used	BIA06	755	Report Type Code	O	ID 1/2

Segment:

REF Reference Identification

Position: 060
Loop:
Level: Heading
Usage: Mandatory
Max Use: 2 (Use 1 of 2)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification.	M	ID 2/3
			"CT" Code for Contract Number		
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Contract

Implementation Note: AN 1/17

Must Use	REF03	352	**Description**	X	AN 1/80

Site

Implementation Note: AN 1/50

	Ref. Des.	Data Element	Name	Attributes	
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

REF Reference Identification

Position: 060
Loop:
Level: Heading
Usage: Mandatory
Max Use: 2 (Use 2 of 2)
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification.	M	ID 2/3
			"84" Code for CDRL		
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

CDRL ID

Implementation Note: AN 1/4

	Ref. Des.	Data Element	Name	Attributes	
Not Used	REF03	352	**Description**	X	AN 1/80
Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

LIN Item Identification

Position:	010
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Not Used	LIN01	350	Assigned Identification	O	AN 1/20
Must Use	LIN02	235	Product/Service ID Qualifier	M	ID 2/2

"ZZ"   Code for Mutually Defined

	Ref. Des.	Data Element	Name	Attributes	
Must Use	LIN03	234	Product/Service ID	M	AN 1/48

"CONSUMABLE COMPONENT SUMMARY"

	Ref. Des.	Data Element	Name	Attributes	
Not Used	LIN04	235	Product/Service ID Qualifier	X	ID 2/2
Not Used	LIN05	234	Product/Service ID	X	AN 1/48
	...				
Not Used	LIN30	235	Product/Service ID Qualifier	X	ID 2/2
Not Used	LIN31	234	Product/Service ID	X	AN 1/48

Segment:

DTM Date/Time Reference

Position:	100
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	10 (Use 1 of 2)
Purpose:	To specify pertinent dates and times
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time. "090" Code for Report Start.	M	ID 3/3
Must Use	DTM02	373	**Date**	X	DT 8/8

Report Start Date

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Segment:

DTM Date/Time Reference

Position: 100
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 10 (Use 2 of 2)
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time. "091" Code for Report End.	M	ID 3/3
Must Use	DTM02	373	**Date**	X	DT 8/8

Report End Date

Format: CCYYMMDD

Not Used	DTM03	337	**Time**	X	TM 4/8
Not Used	DTM04	623	**Time Code**	O	ID 2/2
Not Used	DTM05	1250	**Date Time Period Format Qualifier**	X	ID 2/3
Not Used	DTM06	1251	**Date Time Period**	X	AN 1/35

Segment:

REF Reference Identification

Position:	140
Loop:	LIN
Level:	Detail
Usage:	Mandatory
Max Use:	>1
Purpose:	To specify identifying information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification. "PM" Code for Part Number.	M	ID 2/3
Must Use	REF02	127	**Reference Identification**	X	AN 1/30

Part Number

Implementation Note: AN 1/19

Must Use	REF03	352	**Description**	X	AN 1/80

Nomenclature

Implementation Note: AN 1/80

Not Used	REF04	C040	**Reference Identifier**	O	
Not Used	C04001	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04002	127	**Reference Identification**	X	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04004	127	**Reference Identification**	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier**	X	ID 2/3
Not Used	C04006	127	**Reference Identification**	X	AN 1/30

Segment:

QTY <small>Quantity</small>

Position: 320
Loop: QTY (Loop 1 of 2)
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify quantity information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/3
			Code specifying the type of quantity.		
			"99" Code for Quantity Used.		
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Quantity Used

	Ref. Des.	Data Element	Name	Attributes	
Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

QTY _{Quantity}

Position:	320
Loop:	QTY (Loop 2 of 2)
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/3
			Code specifying the type of quantity.		
			"17" Code for Quantity on Hand.		
Must Use	QTY02	380	**Quantity**	X	AN 1/30

Quantity on Hand

Not Used	QTY03	C001	**Composite Unit of Measure**	X	AN 1/80
Not Used	C00101	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00102	1018	**Exponent**	X	AN 1/30
Not Used	C00103	649	**Multiplier**	X	ID 2/3
Not Used	C00104	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00105	1018	**Exponent**	X	ID 2/3
Not Used	C00106	649	**Multiplier**	X	AN 1/30
Not Used	C00107	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00108	1018	**Exponent**	X	AN 1/30
Not Used	C00109	649	**Multiplier**	X	AN 1/30
Not Used	C00110	355	**Unit or Basis for Measurement Code**	X	AN 1/30
Not Used	C00111	1018	**Exponent**	X	ID 2/3
Not Used	C00112	649	**Multiplier**	X	AN 1/30
Not Used	C00113	355	**Unit or Basis for Measurement Code**	X	ID 2/3
Not Used	C00114	1018	**Exponent**	X	AN 1/30
Not Used	C00115	649	**Multiplier**	X	ID 2/3
Not Used	QTY04	61	**Free-Form Message**	X	AN 1/80

Segment:

<u>SE</u> <u>Transaction</u> <u>Set</u> <u>Trailer</u>

Position:	020
Loop:	
Level:	Summary
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the end of a transaction set and provide the count of the transmitted segments (including the starting (ST) and ending (SE) segments).
Syntax Notes:	
Semantic Notes:	SE is the last segment of each transaction set.
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**SE01**	**96**	**Number of Included Segments**	M	N0 1/10
			Total number of segments included in a transaction set including ST and SE segments.		
Must Use	**SE02**	**329**	**Transaction Set Control Number**	M	AN 4/9
			Identifying control number that must be unique within the transaction set functional group. Assigned by the originator of a transaction set.		
			Cite the same number as the one cited in ST02.		

Appendix G—Enterprise Contractor Integrated Technical Information Service

This Appendix outlines STRICOM's approach to the delivery and interchange of contractually required information with its trading partners, including data required by the joint IPT to execute the contract. It is STRICOM's intent, where practicable, to create a "global" environment within its trading partner community for delivery and interchange of information. In that environment, infrastructure will be managed as a shared resource among all members of the community. The details of the shared infrastructure are described in the functional specification below.

Each member of the community will pay a fair share for and participate in the work of maintaining that infrastructure. However, as a shared resource, it is expected that STRICOM and its trading partners will save substantial amounts over the current fragmented, redundant approach to information interchange.

For the shared infrastructure approach to be successful, each STRICOM and contractor acquisition team will make every effort to avail themselves of the corporate resources before investing in new or redundant infrastructure. Specific program or project infrastructure requirements are permissible. However, they will be additive to the whole trading partner community infrastructure and not acquired and managed as separate stand-alone capabilities. The government shall employ a Single Process Initiative if contractual changes are required to implement the shared infrastructure for a particular program.

Individual acquisition managers shall be responsible for the information content requirements of their program. The requirements include specific data products, schedules for exchange of data products within an integrated product team (IPT), and life-cycle product data management. However, the means to affect the requirements shall be in accordance with this GCO in general and specifically within the context of the Enterprise Contractor Integrated Information Service (E-CITIS) functional specification described below. MIL-STD-974[10] and MIL-STD 2549[11] shall apply to specific information interchange matters not covered in this GCO.

E-CITIS Functional Specification[12]

Background

Two trends—the longtime need to avoid costs and recent changes in the system acquisition environment—are driving the need for an enterprise approach for trading

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[10] MIL-STD-974, *Contractor Integrated Technical Information Service (CITIS)*, 20 August 1973.

[11] MIL-STD 2549, *Industry Standard For Configuration Management Data Interface Standard Replacement is in Process by GEIA.*

[12] The ECITIS functional Specification is the product of the U.S. Army Simulation, Training and Instrumentation Command (STRICOM) and one of its trading partners. Together, they have formed a Working Integrated Product Team, hereafter the "WIP." The WIPT is prototyping a pilot "Enterprise Contractor Integrated Technical Information Service (ECITIS)" using this functional specification. STRICOM considers ECITIS implementation to be a stepping stone to achieving Integrated Data Environment (IDE) with its government and industry trading partners.

partners to share data and work together closely. A corresponding advance in the Internet and related technologies and their widespread use enables electronic data delivery and access and collaboration. Under traditional CITIS, the Government applied funding to each contract for a contract-unique CITIS solution for the contractors to retain contractually required data they developed and to provide the Government electronic access to it in order to allow the Government to avoid the high costs of taking possession and managing the vast quantities of data required to design, build and support modern weapon systems.

The program-by-program approach has resulted in a large number of CITIS implementations. Acquisition commands, program offices and contractors have reinvented the "CITIS wheel" with each new contact. All these functionally equivalent but technically different CITIS implementations are costly, and may not have survived the life of the contract, forcing less effective and more costly data exchanges.

An enterprise approach to CITIS will reduce costs for information sharing while improving the process. For example, an enterprise approach that establishes a shared infrastructure will improve CITIS functionality and reduce variability through application of data and process standards. An enterprise approach will improve CITIS performance through a standardized approach to training, telephone support and on-line help. Standardized functionality and improved performance will lower CITIS costs by minimizing redundant efforts. Also an enterprise approach will enable a "corporate" investment in emerging technology, which is neither possible nor funded in a traditional contract specific CITIS environment.

Defense acquisition reforms have changed the program management environment. The reforms seek to deliver to warfighters what they need, when they need it at a cost they can afford. Under acquisition reform, business processes are speeded through application of technology and process reengineering. A key reengineering change is the use of integrated product (or process) teams (IPTs) comprised of appropriate government and contractor stakeholders. Collaborative work is the hallmark of the new IPT environment. ECITIS is essential to enabling IPT members to collaborate.

In a collaborative environment, the government and its trading partners must agree on provisions for data required for IPT work. This data differs from conventional data deliverables defined by data item descriptions (DIDs) and specified in contract data requirements lists (CDRLs). Effective collaborative work requires more than pre-defined data products. It requires appropriate access to contractor product data management systems (or enterprise resource planning systems) and product-related applications (e.g., compilers and simulation tools). Effective collaborative work also requires management of the IPT members' product-related work (e.g., through workflow management) and the resulting data (e.g., through electronic document management).

ECITIS provides both conventional deliveries of predefined data products (i.e., through DIDs and CDRLs) and a collaborative IPT work environment. However, the requirement to support collaborative work is the essential feature that distinguishes ECITIS from traditional delivery-of-data-in-place CITIS.

Thus, the definition of ECITIS is:

> *A collaborative working environment that provides simultaneous, controlled, electronic access for a specified number of IPT members to contractually required or other documents, information, data and applications using mutually-agreed-upon commercial standards as part of normal business practices.*

This functional specification is applicable to existing programs where trading partners can retrofit its features without adversely affecting program cost, schedule or performance. ECITIS, which applies to all contracts awarded after JAN 2000, also differs from traditional CITIS in that all data from a single contractor need not be stored in the same physical location. Some may be stored by the government and some by industry partners in accordance with contract CDRLs and IPT decisions. However, a common routine for data access is required.

The preferred method for the government to communicate within the ECITIS infrastructure shall be through Internet protocols and Web technologies. IPTs may arrange for public or private network access appropriate to the need to keep classified, militarily significant, proprietary or business sensitive information secure. Whatever network is used, the IPTs shall arrange for appropriate network administration and security measures, including encryption technologies, in accordance with the security functions below. The measures shall be implemented and monitored throughout the contract by the IPT. ECITIS does <u>not</u> preclude the delivery of some data via specified data exchange standards, such as ANSI X12 EDI, as addressed in the basic GCO in paragraphs 4.3.1, 4.3.3, 4.3.4.

<u>Functional Requirements</u>

The following sections list specific functional requirements for E-CITIS. The functional requirements are by responsibility within the trading partner team—either contractor-, trading partner team- or government-provided and as specified in the contract CDRLs.

<u>Contractor-provided Functions</u>

- Access to a computer-mediated collaborative working environment that provides simultaneous, controlled, user-friendly access for a specified number of IPT members to contractually required or other mutually agreed upon documents, information, data and applications.

- Management of contractually or other mutually-agreed-upon required documents, information, data and applications from the following perspectives:

  - Product definition views to include:

    - In-development (I.e., work in progress)

    - Released (I.e., formally controlled data)

    - Delivered (I.e., formally transferred data)

    - Accepted (I.e., formally customer approved data)

- ▪ Other (I.e., non-deliverable data including, but not limited to agendas, minutes, schedules, historical data, etc.).
- Data Dictionary services to include:
  - Data definitions
  - Document catalog
  - Indexing necessary to support IPT and other system life-cycle support requirements
  - Search and cross-reference capability.
- Configuration Management (CM) services to include:
  - Identification (I.e., appropriate product definition) of hardware, software and data
  - Development and control of changes made to program hardware, software and data
  - Status accounting of program hardware, software and data configuration
  - Audits of program hardware, software and data configuration.
- Security to ensure:
  - Authenticity (I.e., The recipient knows who is the actual sender—a person or process—of information received.)
  - Integrity (I.e., The recipient knows that a person or environmental condition has not changed information received.)
  - Confidentiality (I.e., The recipient knows that no unauthorized person has seen information received.)
  - Non-repudiation (I.e., The sender knows that the recipient has received information sent.).

- *Trading Partner Team Provided Functions*
- Configuration Management to include:
  - Managing ECITIS instantiations via a Trading Partner Team Interface Control Working Group
  - Applying appropriate maintenance, technology refreshment and product improvements to maintain ECITIS instantiations currency and effectiveness.
- Document, information, data and application use functions to include:
  - Acknowledge
  - Approve or disapprove
  - Comment

- Execute

- Modify or edit

- Notice of delivery

- Receive

- Search

- Store

- Upload and download

- View

- IPT collaboration tools to include:

  - Workflow management

  - Electronic Document Management

- IPT asynchronous collaborative communication tools to include:

  - E-mail

  - Voice mail

- IPT synchronous collaborative communication tools (I.e., video-teleconferencing)

- Support services to include:

  - Training

  - On-line help

  - Help Desk.

Government-provided Functions

- Customer-perspective Data Management to include:

  - Requirements for product data definition

  - Life-cycle Product Data Management Plans

  - Product data life-cycle management resources

  - Records management.

- Security to ensure:

  - Authenticity (I.e., The recipient knows who is the actual sender—a person or process—of information received.)

  - Integrity (I.e., The recipient knows that a person or environmental condition has not changed information received.)

- Confidentiality (I.e., The recipient knows that no unauthorized person has seen information received.)

- Non-repudiation (I.e., The sender knows that the recipient has received information sent.).

Typical ECITIS Data Types

- Contract information

- Data delivery tracking and notification

- Dictionary

- Financial data

- IPT communications, lists and reports

- Logistics information

- Metrics

- Plans

- Program control information

- Program problem reports

- Program reviews and status

- Program management data

- Safety assessment reports

- Source code

- Specifications

- Test plans and procedures

- Tooling software

- Training facility report

- Engineering drawings and associated lists

- Training CDRLs

- Commercial manuals

E-CITIS Summary

- Applies to all relevant data required by joint IPT's in accordance with CDRLs, and not limited to just technical/product data.

- Transmitted by various methods, e.g., Internet, shared access, Electronic Data Interchange or via another application.

- Hardware/software/application independent.

- Leverage current technologies: Internet and WWW based technologies.

- Ensure data is accessible via standard access and appropriate security control.

- Data location is insignificant (Industry or Government).

- Technology refreshment through command investment.

- Not Trading Partner Specific.

Use of Non-Government Advisors.

Insert the following provision in Section L:

USE OF NON-GOVERNMENT ADVISORS

Offerors are advised that data submitted to the Government in response to this solicitation may be released to non-Government advisors for review and analysis.

(End of provision)

Enabling Clause Between Prime Contractors and Service Contractors.

Insert the following clause, substantially as written, in Section I:

ENABLING CLAUSE BETWEEN PRIME CONTRACTORS AND SERVICE CONTRACTORS

(a) The Simulation, Training and Instrumentation Command (STRICOM) has entered into contracts with (insert the service Contractor(s) name(s)) for services to provide (insert major support areas, such as technical, evaluation, and acquisition management support).

(b) Service tasks involve the application of a broad range of education, skills, knowledge, and experience in many disciplines in support of weapon system acquisition tasks. Tasks involve (insert applicable task detail).

(c) In the performance of this contract, the Contractor agrees to cooperate with (insert the service Contractor's name) by: (insert areas for cooperation) (examples: responding to invitations from authorized personnel to attend meetings; providing access to technical information and research, development and planning data, test data and results, schedule and milestone data, financial data including the Contractor's cost/schedule management system/records and accounting system, all in original form or reproduced; discussing technical matters related to the program; providing access to Contractor facilities utilized in the performance of this contract; and allowing observation of technical activities by appropriate support Contractor technical personnel).

(d) The Contractor further agrees to include in each subcontract over $1 million or 10 percent of prime contract value, whichever is less, a clause requiring compliance by a subcontractor and succeeding levels of subcontractors with the response and access provisions of paragraph (c) above, subject to coordination with the Contractor. This agreement does not relieve the Contractor of responsibility to manage subcontracts effectively and efficiently, nor is it intended to establish privity of contracts between the Government or the service Contractor(s) and such subcontractors.

(e) Service Contractor personnel are not authorized to direct a Contractor in any manner.
(f) Service contracts contain an organizational conflict of interest clause that requires the service Contractors to protect the data and prohibits the service Contractors from using the data for any purpose other than that for which the data was presented.
(g) Neither the Contractor nor their subcontractors shall be required in the satisfaction of the requirements of this clause to perform any effort or supply any documentation not otherwise required by their contract or subcontract.

RFP Language

In addition to the submission of proposal hard copies, if required in Section L of the RFP, offerors' proposals shall also be presented on CD-ROM disks; indexed, labeled for content with the offeror's name, compatible with the Government Concept of Operations (Appendix C of the SOW), and the terms and conditions set forth in Section L of the RFP. Proposals submitted on disks shall be compatible with Microsoft Word 97, presented with one-inch margins; font size will be in accordance with the terms set forth in Section L of the RFP.

Bookmarks

All Microsoft Word documents shall be electronically "bookmarked" using Microsoft Word 97 menu option "Insert" – "Bookmark" capability. The bookmarked sections shall be named to provide easy reference to each section of the SOW down to the 4th level (e.g. 3.14.7.1) paragraphs of the Table of Contents of the SOW, and to the evaluation structure as defined in Section M – Evaluation Factors for Award, of the RFP. The names of all bookmarks shall begin with the initials or the first two letters of the offeror's name, followed by the text name of the section. The bookmark name should indicate the portion of the document to be viewed and contain the text that accompanies it. Each bookmarked section shall not exceed five pages in length.

Figures and Tables

Figures and tables included on diskette shall be included in the Microsoft Word 97 format. Figure text must have the same major orientation as the text it accompanies and be of the same font size (10 point, Courier). Figures need not be submitted as separate files.

Virus Scan

Offerors may determine an acceptable virus scan program. The offeror is responsible to ensure that their proposals are free of viruses. Each diskette or disk submitted must have been checked by the offeror.

STRICOM Reusable Software Library

STRICOM is focusing on reducing the costs associated with procuring and supporting simulation and instrumentation systems by leveraging the commonality across systems and the reuse of system artifacts across the different applications. To accomplish reuse STRICOM requires that every contract deliverable be appropriately marked with at least the four elements. These are:

 a. Copyright
 b. Government Rights
 c. Classification
 d. Distribution

The inclusion of the information above is essential to our ability to take advantage of and reuse our previous investment on future efforts.

As a first step there is a need to address a topic that is confusing and difficult to understand. That topic is the difference between ownership (intellectual property) and government rights to use the material. U.S. law and policy separates the ownership of software and technical data from the government's right to use the software and technical data. The company, companies or person that creates the product retains the ownership of software and technical data.

Copyright

All government procured software can or may include a contractor's copyright legend within the software comments or reflected on technical data documents. This could be in the following form:

 Copyright 1998 The XYZ company: All Rights Reserved

Government Rights

The government obtains rights to software and technical data within the context of a contractual effort. For the most part, rights are a fall-out of the work performed. Greatest rights arise when the government funds a development exclusively. Lesser rights arise if there is mixed funding. The most restricted rights occur when the development was at private expense.

Unlimited Rights

Unlimited Rights apply to both technical data and software. This is the broadest right the government can obtain and is the next best thing to a title. Unlimited Rights is the right to use, reproduce, modify, and disclose to anyone, in any manner for any purpose. This

includes reverse engineering or giving technical data and software to a competitor for commercial purposes.

Government Purpose Rights

Government Purpose Rights apply to both technical data and software. It used to be called Government Purpose Limited Rights (GPLR) and applied only to technical data. It is the same as Limited/Restricted Rights, with one very important difference: Government Purpose Rights allow the government to disclose to others, if it serves a government purpose. Most typical purposes are to procure the item competitively, to compete a service contract, to fulfill an FMS sale, or to participate in Cooperative Research and Development Agreement (CRADA). The practical effect ensures competition in future government procurements. In theory, protecting the commercial market. Generally, this applies for duration of 5 years, then reverts to unlimited rights.

Limited Rights

Limited Rights apply only to technical data. It allows the government to use technical data however, the government cannot use or reproduce the technical data for the purpose of manufacturing the item, or designing or developing a similar item, nor can the government release the technical data to any third party without permission. Some narrow exceptions are emergency repair and overhaul, but only under non-disclosure agreement and only with notice to the contractor.

Restricted Rights

Restricted Rights apply only to software. It is analogous to Limited Rights, but tailored to software usage. Software is permitted on one computer at a time (or only on the computer for which acquired, if acquired under an FY95 or earlier contract). Disclosure to service contractor only for repair or maintenance is allowed, and again, subject to non-disclosure and contractor notice.

Specifically Negotiated License Rights

Specifically Negotiated License Rights apply to both technical data and software. The parties may modify the above-identified rights of (6a) through (6d) by mutual agreement, provided the government is not provided less than limited rights in technical data and less than restricted rights in software.

Commercial License Rights

The standard DFARS data rights clauses do not provide the government with rights in commercial computer software and commercial computer software documentation. The software and its documentation are acquired with the same license that is customarily

provided to the public, unless the license does not satisfy the needs of the government.

A summary of rights to technical data and software is as follows:

What Rights Apply to What Items?						
	Unlimited Rights	Government Purpose Rights	Limited Rights	Restricted Rights	Specifically Negotiated Rights	Commercial Rights
Technical Data	X	X	X	NA	X	X
Software	X	X	N/A	X	X	X

<u>Classification</u>

The classification (unclassified and classified) of the software and technical data insures that no one creates an inadvertent security violation. Most software applications today are unclassified, but there is a trend to include the ability to run classified data for special events. Most software is unclassified to keep the software development simple and uncomplicated. However, the government can append unclassified data with classified data if the system is designed to support such classified data. In this case, it is important that each component be clearly marked. As a general rule mark all things that are unclassified as unclassified. The marking serves as a reminder.

<u>Distribution</u>

All software and technical data should be marked IAW this document. The Distribution Instruction range is from Distribution A (authorizes unlimited public release) to a variety of distributions including Distribution C (approved for US Government only); and Distribution D (approved for Department of Defense and U.S. DOD contractors only). There is other distribution instructions in the DOD directive. Each acquisition program should determine what Distribution Instructions apply to each data or software item procured. Generally, use Distribution A for most items that are available to the public. Mark those items with military content as Distribution C, or Distribution D, or Distribution A. Since most work on M&S includes both Government personnel and contracts, Distribution D is more widely used. Part of the consideration for selecting a distribution statement relates to the above-identified rights obtained by the government. For example, Distribution Statement B or Distribution Statement E is appropriate under the instruction if the data is marked by the contractor with a limited rights legend or is not routinely transmitted outside the government.

<u>Negotiation of data rights</u>

Negotiation of data rights is reserved to the contracting officer. The contracting officer directs which marking to affix as opposed to the technical community's opinion of the rights that the government "should" have.

<u>Web-based CDRL Deliverables</u>

Future plans involve allowing contractors to provide documentation deliverables via the Web instead of submitting hardcopy deliverables. These deliverables may potentially be submitted through an online catalog in DR STRICOM to provide controlled access to our potential contractors who will need to browse our existing repository of assets to identify reusable entities as they develop their proposals and while executing the development contract. This repository will also provide STRICOM with the ability to better perform front-end analyses of new customer requirements to help determine the best acquisition approach based on identified system commonalties and reuse potential.

This section includes a Glossary of terms and acronyms used in this GCO.

A

ANSI - American National Standards Institute

AIS - Automated Information System

B

C

CAD - Computer-Aided Design

CALS - Continuous Acquisition and Life-cycle Support

CCR - Central Contractor Registration

CDRL - Contract Data Requirements List

CITIS - Contractor Integrated Technical Information Service

CM - Configuration Management

CSIM - Chief of Staff Information Management

COI - Community of Interest

COTS - Commercial Off the Shelf

D

DA - Data Administrator

DBA - Database Administrators

DBMS - Database Management System

DoD - Department of Defense

E

E-CITIS - Enterprise- Contractor Integrated Technical Information Service

EC - Electronic Commerce

ECRCs - Electronic Commerce Resource Centers

E/RD - Entity/Relationship Diagram

F

G

GCO – Government Concept of Operation

GDMS - Global Data Management System

GOTS – Government Off the Shelf

H

I

IDE - integrated digital environment

IPT - integrated product teams

ISD - Information Systems Division

IS - Information System

J

JCALS - Joint Computer-aided Acquisition and Logistic Support

JECPO - Joint Electronic Commerce Program Office

JEDMICS - Joint Engineering Data Management Information and Control

K

L

LAN - Local Area Networks

M

N

NAWCTSD - Naval Air Warfare Center Training Systems Division

NIST - National Institute of Standards and Technology

O

OTS - Off-the-shelf

P

PD^{2} - Standard Procurement System/Procurement (SPS) Desktop-Defense

PET - Proposal Evaluation Tool

PLAT - Procurement Administrative Lead Time

POC – Point of Contact

PTACs - Procurement Technical Assistance Centers

Q

R

RFP - Request for Proposal

S

SDW - Shared Data Warehouse

SBDCs - Small Business Development Centers

SGML - Standard Generalized Markup Language

SOW - Statement Of Work

SPS - Standard Procurement System/Procurement (SPS) Desktop-Defense (PD$^{2)}$

SQL - Standard Query Language

STRICOM - U.S. Army Simulation, Training and Instrumentation Command

T

TPAs - Trading Partner Agreements

U

V

VANs - Value Added Networks

VTC - Video Teleconferencing Center

W

X

Y